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VOL. I, NO. 5

Research Bulletin

OF THE

National Education Association

Facts on the Public School Curriculum

Shaping the Nation's Growth Through the Public School Curriculum 313

Statutory and State Board of Education Requirements Relative to Elementary School Curricula 317

Facts on Time Allotments for Subjects in Elementary Schools and Junior High Schools 325

Vote of Expert Opinion on Most Helpful Books Dealing with Curriculum Problems together with Selected Annotated Bibliography 337

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OF THE NATIONAL EDUCATION ASSOCIATION

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FOREWORD

THE CURRICULUM of the public school during the past generation has been in a state of rapid evolution which is still in process. Hundreds of school systems are revising their curricula.

As this work continues discordant voices arise. One deplores "the movement to break away from the hard and fast curriculum of classical studies and to meet the multiform educational demands of the new industrial order." Another demands that we close the school doors to all but the few at an early age so that "the mounting cost of education may be stayed." Others tell us the schools are implanting "a spirit of lawlessness in those who come under their influence." Still others say the schools are running to "fads and frills" and straightway fall to quarreling as to what is meant by "fads and frills."

These are the voices of false prophets. They have been with us from the beginning of public school history. Their destructive criticism must not be allowed to interfere with the school's great work. The facility which the American public school has shown in adjusting itself to a rapidly developing civilization is its greatest virtue. A static school is useless in a dynamic civilization. He who commands the school to stand still while civilization moves on would relegate the public school to a place of insignificance.

If an efficient school system can be maintained for less money, well and good. If it requires more, the Nation can well afford it. We are spending many times the cost of the schools for purposes of infinitely less importance to the Nation's welfare than is a sound system of public education.

In this Bulletin has been concentrated current information concerning the public school curriculum. It is of the type that will be of practical value to the hundreds of school systems now revising their curricula. It is hoped that it will be an aid to those grappling with the problem of evolving a curriculum of maximum potency in producing a citizenry that is physically, intellectually, and morally sound.

J. W. CRABTREE,
Secretary, National Education Association.

Shaping the Nation's Growth Through the Public School Curriculum

The Public School Is Civilization's Life Insurance

The public school is civilization's insurance against the loss of its most valuable form of wealth—its knowledge, ideals and habits of right conduct. The public school is also civilization's method of insuring future progress. It offers a Nation a chance to make a new start with each new generation.

The influence of the school is deep-seated. It deals with plastic children. It fixes in the child's developing nervous system ways of thinking and habits of conduct that will be a part of him throughout his life. When a Nation shapes the curricula of its public schools, it shapes its future. The interest of a Nation in the curricula of its schools is a measure of its interest in its own future.

An Eighteenth Century School Cannot Effectively Train for Twentieth Century Life

The American public school's greatest virtue is its flexibility. The ability which it has shown to modify its organization and the content of its curriculum stands out as unique in the history of educational systems. It has recognized that the educational methods which sufficed in the eighteenth century will not do for the twentieth.

As a result the public school is one of the great spiritually constructive institutions that has held its own in an age of materialism. There is not a supporter of a new cause who does not attempt to have it adopted as a subject in the school curriculum. School attendance has increased three times as rapidly as the general population since 1913. The increase in attendance in the upper divisions of the schools, where attendance is wholly optional, has been most rapid. These facts demonstrate the clear recognition of the importance of the school's influence on the life of the individual and the Nation.

It is true that the public school has not achieved its growth without growing pains. Any rapidly growing institution makes mistakes. However, the growing pains of the public school should not be mistaken for organic disease. He who condemns the school for its efforts to adapt its organization, methods, and curriculum content to the needs of an age of rapid change condemns the greatest virtue that the school possesses. It is this characteristic that has enabled the school to hold and strengthen its position as a constructive institution. A static school in a dynamic civilization soon loses its influence.

What Is the School Trying to Do?

The present objectives of the public school are fundamentally sound. The school's major objectives as stated in recently published courses of study may be summarized under the following heads:

1. *Character development.*—The public school aims to create an environment in which right habits of conduct—fundamental to the development of solid moral integrity—are fixed in the lives of children. This is the all-inclusive aim. The other objectives are subsidiary and contributory to this one fundamental aim.

2. *Command of the fundamental processes.*—Command of the Three R's is recognized as one of the principal outcomes of the school. Over half of the time of elementary school children is given to mastering these subjects.

3. *Health and physical efficiency.*—The training of children in habits of healthful living is one of the objectives of education from the kindergarten through all the grades.

4. *Good citizenship.*—Schools are being organized more and more in a manner definitely designed to give children practice as good citizens. It is recognized that *being* a good citizen is more important than merely knowing how to be one.

5. *Training for home life.*—"The loss in influence of the home" justifies the inclusion in school curricula of activities designed to make children better cooperators in the life of the family.

6. *Vocational efficiency.*—Basic training and practical skills necessary to vocational efficiency together with an appreciation of the

other man's job are set up as one of the objectives for modern school systems.

7. *Worthy use of leisure.*—The school definitely aims to equip each child with simple and wholesome tastes so that the increasing leisure time that civilization is making possible may be an asset rather than a liability to the race. The ability to read, for example, is not enough. The habit of reading should be one of the results of the public school course.

8. *General mental efficiency.*—The ability to study effectively, to concentrate attention, and to do independent thinking is also one of the principal objectives of the public school.

The complete realization of these fundamental aims by the school would solve most of our social and economic ills. The public school is squarely facing the responsibility of achieving these great purposes. Every resource at the disposal of school people is being used to devise more effective means of attaining the fundamental objectives of education. Curricula are being revised on the bases of a re-evaluation of social institutions and a more scientific understanding of child nature. The public school is the only great institution whose sole reason for existence is the attainment of the eight fundamental objectives listed above. Society's greatest hope of attaining these objectives is by strengthening its public schools.

How Is a Child's Time Divided Between Subjects?

In recent years much has been heard about "fads and frills" in the public schools. There is often disagreement as to what "fads and frills" are. What appears as a "fad" to one man is an "essential" to another. The subject that is "fundamental" in one person's thinking is a "frill" in another's.

The division of a child's time in present-day elementary schools does not show that the newer subjects are being given undue emphasis. A survey just completed[1] shows that in his elementary school career a child's time is divided as follows:

Subject	Per cent of Time
The Three R's [reading, writing, arithmetic, spelling, and language]	51
Other Fundamentals [history, civics, geography, and science]	14
Health and Hygiene [hygiene, physical training, and recess]	15
Industrial Arts, Drawing, and Music	14
All Other Subjects, Opening Exercises, etc.	6

Over half of a child's time in the elementary school is still given to mastering the Three R's. This is enough since life is made up of far more than the ability to write, to do sums, and to call words from a printed page.

Is the School of Today More Efficient Than That of Yesterday?

Man is prone to magnify the glories of the past. This human failing leads many to compare unfavorably the schools of yesterday with those of today. However, there is no evidence to show that the schools of a generation ago were more efficient than present day schools. Such evidence as exists points in the opposite direction.

The Springfield Tests Show that the Three R's Are Better Taught Today Than They Were Two Generations Ago

In 1905 several sets of old examination papers, written in 1846, were discovered in the attic of a school building in Springfield, Massachusetts. These 1846 examinations have been given to children in present day schools and the results compared.

The results of such comparison may be summarized in the following quotations from *The Springfield Tests.*[2]

"1. Whatever may be said regarding the schools of half a century ago, these old test papers present indisputable evidence of their

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[1] *Department of Superintendence Second Yearbook. The Elementary School Curriculum.* National Education Association, 1924, p. 142.

[2] Riley, John L. *The Springfield Tests—A Study in the Three R's.* Springfield, Mass., Holden Patent Book Cover Co., 1908, 51 pp.

inferiority as compared with the schools of the present day.

"2. Anybody who would examine the eighty or more sheets of specimen penmanship of the class of 1846 would be almost willing to accept the statement of the School Committee of Springfield in their report of 1853 that 'there are but few in our schools who attain excellence in this beautiful accomplishment [penmanship] or even a moderate degree of skill.' The results [of present day school children] seem decidedly superior to those attained under old-time methods.

"3. The results of these two tests [spelling and arithmetic] seem to indicate that today, children are not only better spellers, but that they reason better in arithmetic, and are more accurate in ciphering than children of about the same age half a century ago."

How Efficient Were the Schools of a Generation Ago?

There is definite evidence that the schools of the middle of the last century were very inefficient. A survey of the Boston schools was made in 1845. These schools were probably among the best in the country at that time. The following statements are quoted from this 1845 Survey of Boston's Schools:[1]

"1. It is very difficult to believe that, in the Boston schools, there should be so many children in the first classes [eighth grades] unable to answer such questions; that there should be so many who try to answer, and answer imperfectly, that there should be so many absurd answers, so many errors in spelling, in grammar, and in punctuation.

"2. There is another sad reflection suggested by these answers. They show, beyond all doubt, that a large proportion of the scholars of our first classes [eighth grades], boys and girls of fourteen or fifteen years of age, when called upon to write simple sentences, to express their thoughts on common subjects, without the aid of a dictionary or a master, cannot write, without such errors in grammar, in spelling, and in punctuation, as we should blush to see in a letter from a son or daughter of their age. And most of these children are about finishing their school career; they are going out into life."

The *Common School Journal* for October, 1845, commented on the results of this investigation of the Boston schools as follows:

"We have no wish to blazon abroad the defects of these schools; but if this occasion should not be made use of, for admonition and warning, the calamity of their present condition would not only be gratuitously suffered, but it might be perpetuated for years to come. . . .

"No one can look carefully into the details of this examination without discovering an accumulation and redundancy of evidence in support of the declaration made by both of the committees, that the children have been superficially taught."

The Schools of Today Are Doing More and Doing It More Efficiently

The burdens placed upon the modern school have been tremendously increased in recent years. Parents have turned over many duties in the training of their children that were formerly performed in the home. These the schools perform, not because they particularly desire to be responsible for them, but because if not cared for by the school they would often be neglected altogether.

In spite of these additional burdens, the school is performing its traditional work more effectively than ever before.

How About the Curriculum and School Costs?

Under the influence of the general demand for reduced taxation some people have demanded a reduction of school privileges. They speak of "fads and frills" and assume that the elimination of these will result in lowered school expenditures. This is a false hope.

These people fail to realize that it costs little if any more to conduct a school that includes the newer subjects in its curriculum than one that limits itself wholly to the Three R's.

For the proper education of a child in a public school the following are essentials:

1. A trained and capable teacher.

[1] The statements given are quoted from: *Then and Now in Education, 1845-1923.* Caldwell and Courtis. Yonkers-on-Hudson, N. Y., World Book Co., 1923. P. 46 and following.

2. A seat in a properly constructed school building.

3. A reasonable sized class—not over 40 pupils.

4. A school year of at least 180 days of not less than five hours per day actual instruction.

These are necessary to any effective public school, no matter what is taught. When these are provided, practically the whole cost of a school has been met. Whether this equipment is used in giving five full hours of drill in the Three R's, or whether part of the time is used in giving instruction in such subjects as history, hygiene, and music makes but little difference from the point of view of cost.[1]

The only way whereby a substantial saving may be made is by closing the school's doors to children at an early age and thereby forcing them into industry untrained. According to this plan, only a small percentage of our population would be allowed anything in addition to an elementary education. This method has already been advised by our leading reactionaries as the means whereby "the mounting cost of education may be stayed."

Whether this is wise democratic doctrine or not need not be debated here, except one phase of the whole situation, which may be discussed under this question:

Can the Nation Afford a Liberal Education for its Children?

If the economic resources of our Nation are so meagre that we must limit the education of the great mass of our children to a few years of intensive drill in the Three R's, the problem of revising our curriculum is a very different one from that involved if we expect to offer the opportunity of a liberal education to all.

In the first instance, the curriculum problem is one of creating an effective educational treadmill on which the great mass of children will labor for a few years and then go into industry. In the second instance, our task is one of revising and refining our present curriculum so as to bring the public school up to maximum efficiency in solving our economic, social, and political problems.

This vital issue can be answered definitely and truthfully on the basis of facts. The Nation can easily afford to give a liberal education to all its children.

The Federal Census just completed places the wealth of the United States at *320 billion dollars*. Our annual income during recent years has averaged well *over 60 billion dollars*. Against this we have spent for education an average of less than *1½ billion dollars* each year.

An insignificant fraction of our wealth and income is sufficient to provide for present educational costs and also for increased costs, should increased numbers of children apply for the advantages of a liberal education.

It is true that if we assume that everything else is of prior importance and should take precedence over education, there will not be a surplus left whereby every American child can be guaranteed the opportunity of a liberal education. Instead of spending 20 billions for luxuries each year, we may have to cut this expense to 18 billions. Or even better, we can set up education as one of the primary needs—one of the "fixed charges"—of civilization and then let the non-essentials take care of themselves. The American people have enough good judgment and sufficient faith in education to do just this. They will do it during the coming years.

In short, the problem of the public school is not one of deciding as to just what small percentage of our population should be trusted with an education, but of revising and refining curricula content so that every child who desires a liberal education may have it—with maximum benefit to himself and to the Nation.

The facts presented in the subsequent sections have been collected for the purpose of aiding those who are laboring to remake the curriculum of America's democratic public school.

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[1] A detailed discussion on this point is found in *Elementary School Costs in the State of New York*. A report reviewed and presented by the Educational Finance Inquiry Commission. New York, Macmillan, 1924. Chapter X.

Statutory and State Board of Education Requirements Relative to Elementary School Curricula

"Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."—ORDINANCE OF 1787.

Outstanding Facts Revealed by a Study of State Regulations of Elementary Curricula

The principal objective of this section is to make available for those charged with curriculum revision a bird's-eye view of the existing situation as to State regulations relative to elementary courses of study. The outstanding features revealed are these:

1. Practically every State has a large number of prescriptions as to what all schools must include in their curricula.

2. Whereas a few laws are very specific and tend to produce undue uniformity, a great many of the prescriptions are rather general and leave proper freedom and initiative to local school authorities.

3. The prescriptions as set up now are determined by two methods:

   (a) By legislative enactments.
   (b) By rulings of State Boards of Education.

4. Too much of the legislation in the past has been ill considered, the result of temporary enthusiasms, the action of propagandists.

5. The regulating of the elementary school curriculum through State action is of great significance.

Who Is Responsible for What Is Taught in the Elementary Schools?

The expansion of the elementary school curriculum has often been laid to local school officials. As a matter of fact, it has come in response to demands made by the public in general. All groups of our population have sincere faith in the effectiveness of the public school—in its ability to shape modes of thought and habits of action. This faith is shown by the determined efforts, of those who have some idea which they want to function in the lives of the people, to have it included as a *required subject of instruction* in the public school.

Changing domestic and economic conditions have resulted in the public demanding new forms of service from the school. Pressure from outside the schools have changed them from places for the intellectual training of a selected few to public service stations whereby and wherein all may be served irrespective of race, color, creed, economic status, or parental occupation.

Society has demanded physical and health education, courses in civics and patriotism, in fire and accident prevention, in music and drawing, in industrial and household arts, in science and commercial studies, expanded options in foreign languages, history, etc., not alone for the sake of children, but more particularly for its own sake.

No clear-thinking citizen would say that a local community or a State does not have the right to determine what its schools shall teach. It can be argued with considerable justice, however, that the methods which have been used in the past in exercising this control have not always brought the best results in the effective functioning of the school system. In short, there are certain principles that should guide those who would determine the instruction that is given in our common schools. It is with this problem in mind that the facts presented in this section have been gathered.

To What Extent Are Elementary Curricula Determined by State Requirements?

To determine what the State elementary curriculum requirements are in each of the several States, State school superintendents were asked to list the subjects or topics required to be taught by law in their States, also the name of the document, page, article, and section where the law citing these requirements may be found. These were tabulated for each State. The requirements of the State Board of Education were also included when the law gave all power to this body.

The preliminary tabulations giving the list of subjects required by legislative enactment or by rulings of State Boards of Education, as well as days to be observed as holidays or by special programs, were returned to State superintendents to be rechecked. Tables 1 and 2 present tabulations as finally approved by the forty-eight superintendents.

TABLE 1.—SUBJECTS AND TOPICS REQUIRED TO BE TAUGHT IN THE ELEMENTARY SCHOOLS

(Asterisk indicates sub-

Subject	Ala.	Ariz.	Ark.	Calif.	Colo.	Conn.	Del.	Fla.	Ga.	Idaho	Ill.	Ind.	Iowa.	Kans.	Ky.	La.	Maine	Md.	Mass.	Mich.	Minn.	Miss.	Mo.	Mont.
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*	*25*
Reading	*	*	*	*	*	*	*	*	*		*	*		*	*	*		*	*			*	*	*
Spelling	*	*	*	*	*	*	*	*	*		*	*		*	*	*		*	*			*	*	*
Penmanship	*		*	*	*	*	*		*	*	*	*		*	*	*		*	*			*	*	*
Arithmetic	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*		*	*			*	*	*
English [1]	*	*		*	*	*	*	*	*	*	*	*		*	*	*		*	*			*	*	*
Classics														*										
Geography	*	*		*	*	*	*	*	*	*	*	*		*	*	*		*	*			*	*	*
U. S. History	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*
Constitution of the U. S.	*			*			*		*	*			*						*		*			
Declaration of Independence																					*			
State Hist. and Constitution	*			*	*		*		*				*	*	*	*		*2a		*		*		*
Citizenship [3]	*	*	*	*		*		*	*	*			*	*	*	*	*	*	*		*	*	*	*
Morals and Manners [4]				*						*		*			*		*	*	*		*	*		
Hygiene [5]	*		*	*	*	*	*		*	*		*	*	*	*	*	*	*	*	*	*	*	*	*
Physiology		*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Scientific Temperance [6]	*			*	*	*		*	*	*		*		*			*	*	*	*	*	*	*	*
Physical Education	*			*		*	*			*	*		*		*	*	*	*	*		*		*	
Effects and Prevention of Tuberculosis																			*				*	
Communicable Diseases																				*				
Nature Study or Ele. Sci	*	*		*			*							*								*	*	
Elementary Agriculture	*		*	*				*	*			*		*	*							*	*	*
Horticulture			*																					
Bird Study [8]																								
Forestry																								
Cotton Grading																								
Household Art or Home Economics				*								*				*			*6				*	
Manual Tr. or Hand Work				*			*												*6				*	
Elem. Ind. Work												*												
Industry and Economy																								
Thrift				*						*													*	
Elementary Bookkeeping				*																				
Music				*			*			*			*	*	*	*							*	
Drawing and Art				*			*			*	*			*		*		*					*	
Picture Study																							*	
Spanish																								
Elementary Algebra		*	*					*														*		
Safety First-Accident Preven.																								
Humane Treatment Animals	*			*	*			*			*				*		*			*			
Fire Prevention				*																				
All Instruction in English Languge	*			*	*	*					*	*	*	*	*		*		*	*	*	*	*	

[1] English includes grammar, composition, and literature. [2] Includes State Geography in New Jersey. [2a] State History but not State Constitution in Maryland. [3] Citizenship includes community civics, Americanism, patriotism, and Civil Government. [4] Stated in some School laws as "Good Behavior." [5] Hygiene includes health education and sanitation. [6] Scientific Temperance or effects of stimulants and narcotics in many States is part of the Hygiene and Physiology courses. [7] "Provided that Elementary Agriculture shall not be required to be taught in independent school

In addition to the days specifically listed, the following days are indicated in Column 17 of Table 2. They are required by legislative enactment or by State Board of Education in certain States to be observed as school holidays or by special programs:

Robert E. Lee Day, January 19th, is observed in Arkansas, Georgia, and Virginia.

Maine Memorial Day, February 15th, is observed in Connecticut.

Good Friday is listed as a school holiday by Connecticut and Maryland.

Patriots Day, April 19th, is observed in Maine and Massachusetts.

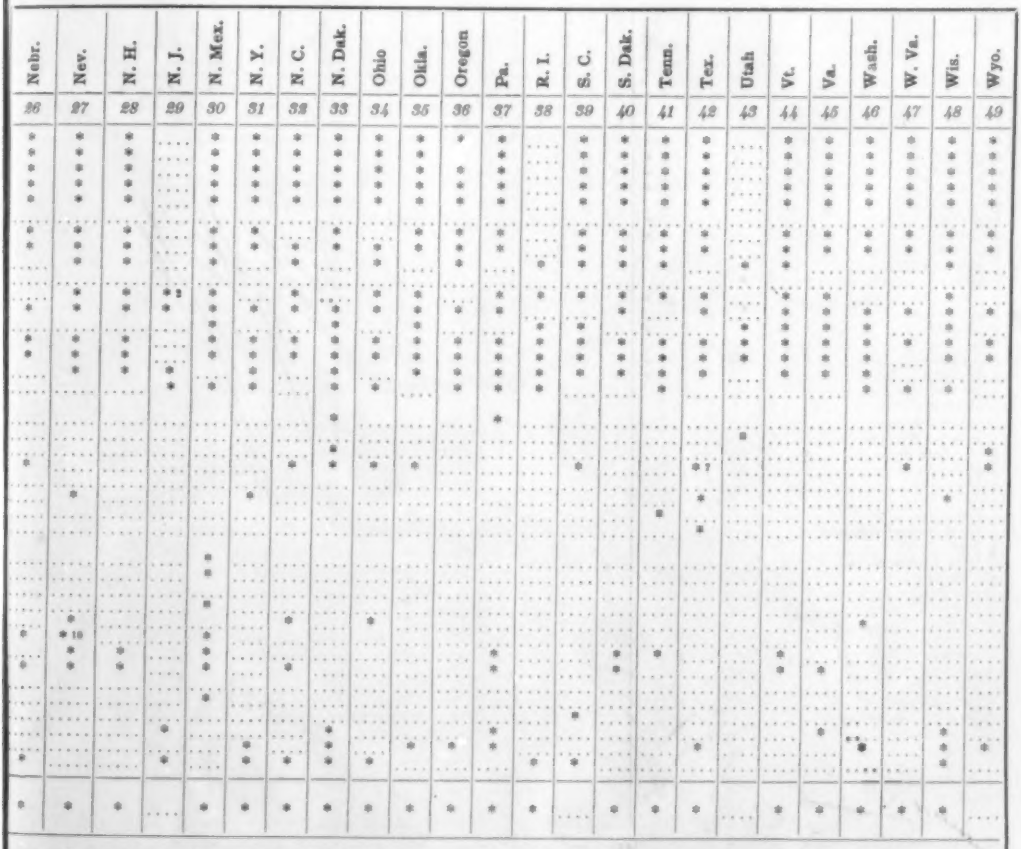
March 2nd is celebrated in the Texas schools as the anniversary of the Declaration of the Independence of the Texas republic.

June 3rd, the birthday of Jefferson Davis, President of the Southern Confederacy, is also observed in Texas.

Good Roads Day must be observed in Colorado on the second Friday of May.

BY STATE LEGISLATIVE ENACTMENTS OR BY RULINGS OF STATE BOARDS OF EDUCATION

ject is required)



districts having a scholastic population of 300 or more, unless so ordered by school boards." [8] In some States this includes the Preservation of Fish and Game. [9] Required in cities of 20,000 or over. [10] Includes business forms.

It will be noted that requirements relative to the reading of the Bible in the public schools are not included in this study. For a complete report on these requirements see U. S. Bureau of Education Bulletin, 1923, No. 15, *The Bible In the Public Schools.*

Adoption of Federal Constitution Day, September 17th, must be observed in Michigan. Carlton Day is observed on October 21st and Roosevelt's birthday is celebrated on October 27th.

Fire Prevention Day must be observed in the schools of Connecticut on October 12th.

Pioneer Day must be observed in the schools of Montana and Utah.

Uncle Remus Day is celebrated in Georgia on December 19th.

Woodrow Wilson Day is observed in South Carolina.

These do not represent all the days which

TABLE 2.—DAYS REQUIRED BY STATE LEGISLATIVE ENACTMENT OR BY RULINGS OF STATE BOARD OF EDUCATION TO BE OBSERVED BY SPECIAL PROGRAMS OR AS HOLIDAYS

(Asterisk indicates day is observed)

State	Jan. 1, New Year's Day	Feb. 12, Lincoln's Birthday	Feb. 22, Washington's Birthday	Bird [1] and Arbor Day	May 30, Memorial Day	June 14, Flag Day	July 4, Independence Day	First Monday in Sept., Labor Day	Oct. 12, Columbus Day	Temperance [1] or Frances Willard Day	First Tuesday in Nov., General Election Day	Nov. 11, Armistice Day	Last Thursday in November, Thanksgiving	Admission [1] or State Day	Dec. 25, Christmas	Miscellaneous
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Alabama	*	*	*	*[2]	*	*	*		*	*			*	*	*	
Arizona	*			*[2]			*								*	*
Arkansas	*	*	*	*	*		*	*	*		*	*	*		*	
California	*	*	*	*			*		*					*	*	
Colorado	*	*	*	*	*	*	*		*			*	*	*	*	*
Connecticut	*	*	*	*	*		*	*	*			*	*		*	***
Delaware	*	*	*	*[2]	*								*		*	
Florida	*			*			*			*			*		*	
Georgia	*		*	*	*		*						*	*	*	**
Idaho	*				*								*		*	
Illinois	*						*					*	*		*	
Indiana		*	*	*					*							
Iowa	*			*			*								*	
Kansas	*	*	*		*	*	*	*		*					*	
Kentucky	*	*	*				*	*				*			*	
Louisiana [3]																
Maine			*	*	*		*	*	*			*	*		*	*
Maryland	*		*	*	*		*					*	*	*	*	*
Massachusetts	*	*	*	*	*	*	*	*	*				*		*	*
Michigan	*	*	*		*		*	*	*			*	*		*	***
Minnesota	*	*	*		*		*	*			*	*	*		*	
Mississippi	*						*					*	*		*	
Missouri	*	*	*	*			*		*	*		*	*	*	*	
Montana	*	*	*	*[2]	*	*	*	*	*		*[4]	*	*		*	*
Nebraska	*						*								*	
Nevada	*	*	*	*	*		*	*		*			*	*	*	
New Hampshire [3]																
New Jersey	*	*	*	*[2]	*	*	*		*			*	*		*	
New Mexico	*						*								*	
New York	*	*	*	*	*	*	*	*	*		*		*		*	
North Carolina				*						*				*		
North Dakota	*	*	*		*		*	*	*		*[4]	*			*	
Ohio	*		*	*	*		*	*		*					*	
Oklahoma	*		*	*	*		*							*	*	
Oregon	*	*	*	*	*		*	*	*	*	*[4]	*	*		*	
Pennsylvania				*						*						
Rhode Island	*	*	*	*[2]	*		*	*	*				*	*	*	
South Carolina	*						*	*				*			*	*
South Dakota				*[2]	*		*			*			*		*	
Tennessee				*						*			*		*	
Texas	*		*				*	*	*		*	*	*		*	**
Utah	*	*	*	*	*		*	*							*	*
Vermont	*		*		*		*	*	*			*	*		*	
Virginia	*		*				*								*	*
Washington	*		*		*		*	*		*			*	*	*	
West Virginia	*	*	*	*	*		*	*			*	*	*		*	
Wisconsin	*		*		*		*			*					*	
Wyoming	*	*	*	*[2]	*		*	*				*	*		*	

[1] Date varies in different States. [2] School Boards determine calendar. [3] Arbor Day, not Bird and Arbor Day.
[4] Holiday only when school-house is used as polling place.

e celebrated as school holidays or by special hool programs. Many States, such as Idaho example, include in their School Laws tements similar to the following: "Addi- nal holidays—such other days as the State ard may designate, following a proclama- n of the governor of the State."

hould There Be Specific Statutory Requirements Regarding Curricula?

Whether specific statutory requirements as content and time allotments of school curricula result in the best possible plan of education for each local district is a question that cannot be answered without careful study. Those whose duties bring them in contact with local educators who are obliged to meet the requirements and who have an opportunity to observe results, are among those who have a right to venture an opinion.

Charles J. Strahan, Deputy-Assistant Commissioner of Education of New Jersey, has given special attention to this subject. He presents the facts given in Table 3 which pictures the situation in his State.

TABLE 3.—THE SUBJECT MATTER PRESCRIBED BY STATUTE IN NEW JERSEY[1]

Pamphlet Law	School Law Edition of 1921	Subject Matter	Estimated Time Required
1884	p. 161	Arbor Day to be observed by special exercises for the day.	One-half to one day each year.
1887	p. 162	Day preceding all legal holidays to be observed by exercises for development of patriotism.	Ten half-days.
1888	p. 150	Manual training subsidy of 50% when course is approved by the State Board of Education.	No definite hours demanded.
1894	p. 160	Study of nature of alcoholic drinks and narcotics to be taught in all schools as thoroughly as other like branches.	One hour per week.
1907	p. 162	Fourteenth of June to be celebrated as Flag Day with appropriate exercises.	One-half day each year.
1909	p. 159	Medical inspection compulsory.	One-half hour each year for each pupil.
1911	p. 12	Two fire drills each month in all schools of two or more rooms.	One-half hour each month.
1913	p. 187	Vocational Schools—Industrial education, agricultural education, household arts education; 50% paid by the State up to $10,000 in any district.	Not required.
1913	p. 287	All schools, public and private, to teach ways and means of preventing accidents.	Fifteen minutes per week required.
1913	p. 288	Each principal shall arrange yearly for a lecture in accident prevention by a representative of American Museum of Safety.	Three-quarters of an hour per year.
1916	p. 88	Compulsory reading of at least five verses of the Old Testament and repeating of the Lord's Prayer.	Fifteen minutes per day.
1916	p. 298	Recommends teaching of thrift and saving fund deposits.	Not required.
1919	p. 111	Every child shall attend school in which at least reading, writing, spelling, English grammar, arithmetic, and geography are taught in the English language.	Not specified.
1919	p. 181	Physical Training Law requires teaching of exercises, community health and safety, with instruction in citizenship relating to community welfare with special reference to developing bodily strength and vigor.	Thirty minutes per day required.
1919	p. 185	In the High Schools—American Democracy and Community Civics shall be taught.	120 hours' time required.
1919	p. 186	Elementary schools shall give course in geography, history and civics of New Jersey.	Sixty hours.
1920	p. 288	Fire Prevention shall be taught.	One hour each month required.

[1] *Report of a Public Conference on the School Curriculum of New Jersey*, State Department of Public Instruction, Trenton, New Jersey.

Commenting on the statutory course of study requirements of New Jersey, Strahan writes:

It would seem that there has been too much legislative action in determining school curricula, both by direct requirement as to content with time allotments, as well as indirectly by subsidies.

The specific statutory requirements have decided for many districts practically the entire curricula, while optional subjects added to the courses of study in accordance with the desires of the respective communities have been liberally subsidized.

The State Board of Education and city and township boards as laymen, acting upon the professional thought of educators, will not only give a sane view to curricula and methods, but they can interpret the common thought of the State and their respective communities in the light of a developing civilization much better than legislative action, the influence of which too frequently extends beyond the time it was formulated to serve.

Legislative action in the main has been helpful in the promotion of education in the State. The legislative field, however, lies not in determining by statute the means and processes of education, which belong to boards of education and educators, but in the enactment of such laws as will:

1. Protect and promote the welfare of the State by requirements as to schools being kept open, teachers trained, and pupil attendance.
2. Determine relation of districts to each other and to the State.
3. Guard the schools against detrimental influences.
4. Lastly and of most importance, help the Legislature, itself, to comply with the mandate of the constitution, that the Legislature shall provide a thorough and efficient system of free public schools; and in this most important duty to fix, with equal justice, the responsibility for the support of the schools and the distribution of the benefits of public school education.

What Opinions Do State Superintendents Hold Regarding Statutory Requirements?

1. *What are the Fundamental Underlying Principles?*

State Superintendents and Commissioners of Education when listing the subjects required to be taught by law in their States were asked to state briefly principles which they felt should govern the enactment of laws requiring the teaching of these subjects.

The following opinions were expressed:

The ideals to be attained rather than the subjects to be taught should be the basis of legislative enactment.

Those principles which have to do with active participating citizenship should govern the enactment of laws requiring the teaching of certain subjects.

The common consensus of opinion and practice in the country should be the guiding principle; always remembering that the purpose of public education is preparation for citizenship.

Statutes should be so generally stated that there can be a harmonizing with general courses. Legislation should prescribe only essentials.

Such laws should be fundamental and rather general to insure adaptability.

The needs of the community to be educated, occupation of the people, nationality, and native language are factors which should govern the enactment of laws requiring the teaching of certain subjects.

Universality of application should be a fundamental principle underlying legislative enactments.

Details should be left to State Boards of Education to organize.

The school program is a technical document. It should not be detailed by interested laymen but by superintendents, school boards, and State boards of education.

I do not favor laws requiring the teaching of subjects.

Entire procedure of adding subjects to curriculum by legislative enactment is unscientific and improper.

2. *Should Present Statutory Requirements be Rescinded?*

In the light of the above statements, the answers of fourteen State superintendents, commissioners of public instruction or their deputies to the question, Which of the laws requiring certain subjects to be taught in your State should be rescinded?, are of interest. Eleven were of the opinion that *none* should be rescinded. One commissioner qualified his statement by saying: "None should be rescinded because such action would be misunderstood." Another gave as his reason the fact that in his State the law does not require definite amounts of subjects named. According to a third commissioner, there is no need of rescinding the laws, since they are sufficiently elastic not to thwart the plans of local school boards. The replies from offices of only three State superintendents stated that all sections of the law dealing with statutory school subjects and prescribed time allotments should be rescinded. The reasons given for this opinion were as follows:

The legislature should indicate objectives rather than subjects.

The curriculum should be made more flexible by leaving such matters in the hands of the State Department of Public Instruction and the State Board of Education.

The State Board of Education of my State has ample power to cover the field.

3. *Should there be Additional Statutory Requirements?*

The question as to what additional subjects or topics should be required to be taught by law was answered by fifteen State superintendents. Twelve answered pointedly, "None." One superintendent commented that no additional subjects should be required until certain other subjects have been dropped from the curriculum. Another left no doubt as to his views. He wrote: "We do not want laws along this line. We prefer to have power in hands of State Board of Education."

Only three State superintendents stated they were in favor of additional statutory curriculum requirements. Two superintendents would have laws in each of their States requiring physical education in all the elementary grades. Another superintendent would have a law making the teaching of elementary science compulsory throughout his State.

A Criticism of Educational Legislation

The preceding material casts considerable doubt upon the wisdom which has functioned in the prescription of curricular requirements by State legislatures.

There is some justification apparently for the following statement regarding curricular legislation by C. L. Phelps, president, State Teachers College, Santa Barbara, California:

> It is obvious that educational legislation has not been based on any scientific principle, but that it has been enacted at the request of some interested body which was able to muster sufficient votes to pass each measure as it was presented. Even so, it might not be so bad if educators or persons familiar with educational conditions as a whole always gave the advice upon which legislation is based. But such is not the case. Laws are quite as likely to be enacted on the advice of an agriculture club, a woman's club, a humane society, or an organization for the promotion of thrift as upon the counsel of students of educational possibilities and limitations as a whole. Such legislation represents, of course, a combination of partial views of the whole field. It is cumulative and may easily overload the machinery of education to the breaking point without exhausting the possible additions.[1]

Legislation Affecting the Curriculum Put on a Scientific Basis

Before legislation affecting the curriculum can be put on a scientific basis there must be:

1. *A clear definition of the fundamental objectives of school work.*

People see education from many different angles. They are apt to emphasize values according to their own special interests. The person who makes laws relative to what children shall be taught in the public schools should have a clear conception of what the schools are trying to accomplish in terms of human product.

2. *There must be a more scientific method of budgeting school time.*

When the fundamental objectives of school work are listed, we at once recognize that they are not all of equal importance—some must be given more time than others. When time allotments are budgeted according to values placed upon outcomes, it will be easier to keep out the hobbies of short-sighted individuals. In other words, the value of each subject should be considered in relation to other subjects.

While any single piece of legislation relative to curricular requirements considered in itself may be good, it must be remembered that there are only five hours in a school day and there are limits to the rate of a child's learning. The comparative value of each requirement must be considered. Is it better than the others? Is it best for the particular pupils of a particular school? To gain a better balance of values, C. L. Phelps proposes a tentative weighted scale for use in elementary schools, consisting of 100 points distributed according to the average judgments of 62 city school superintendents and teachers' college presidents located at different parts of the United States. In this scale, the amount of emphasis to be given to each objective is indicated by numerical coefficients. Since "ethical character" is inclusive, and for that

[1] C. L. Phelps, *A Weighted Set of Educational Objectives*, Sierra Educational News, September, 1923.

reason cannot be weighted in terms of the other objectives, it is not included in the rating. Following is the weighted set of objectives:[1]

Health	18.4
Command of Fundamental Processes	30.8
Worthy Home-Membership	12.3
Vocation	10.4
Citizenship	17.6
Worthy Use of Leisure	10.4

This tentative scale when extended to include all the best professional and lay thought of the Nation would lead to more scientific curricular revision than do the present "gas attacks" which deal largely in generalities.

3. *There must be more scientific relationships developed between the general public, the State Legislature, the State Board of Education, and the local community.*

(a) The State has a right to control public education within its borders; but this control should not be detailed—except insofar as to guarantee certain minima essential to every school. Included in these are: length of term, safe and sanitary plant, and reasonably well-trained teachers.

Ellwood P. Cubberley, in his Public Education in the United States,[2] analyzes the fundamental principles of legislative enactments. He shows that the State may not only levy taxes for the support of schools, compel attendance, but may also set standards. In regard to this point he writes: "While either too much liberty or too much State oversight may result in weakness in the local systems maintained, some State oversight and control must be exercised if strength is to be developed. The formulation of minimum standards from time to time, the protection of these standards from being lowered by any private or sectarian agency, and the stimulation of communities within the State to additional educational activity, these have now come to be accepted both as fundamental rights and duties of the State."

(b) The State Board of Education, advised by educational experts, should be trusted to exercise the functions for which it exists.

Essential Relationships Between State Legislatures and State Boards of Education

The following statements define the relationships that should exist between State Legislatures and State Boards of Education relative to elementary curricula:

1. The State legislature should state only major educational objectives in general terms. Laws should be fundamental and general to insure adaptability. In most instances the bases of the laws should be the ideals to be attained rather than the subjects to be taught.

2. The State Board of Education, in conference with and advised by its educational experts, both State and local, should set up, in not too great detail, only such curricular requirements and time allotments as are deemed absolutely essential to the attainment of the major educational objectives fixed by the legislature.

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[1] The objectives given above are those set up by the Committee on the Reorganization of Secondary Education. See: U.S. Bureau of Education, Bulletin, 1918, No. 35, *Cardinal Principles of Secondary Education.*

[2] Ellwood P. Cubberley, *Public Education in the United States*, Boston, Houghton Mifflin, 1919. pp. 490–495.

Note—In connection with this topic see also W. W. Theisen, *The City Superintendent and the Board of Education.* New York Teachers College, Columbia University.

ALL INTELLIGENT thinkers upon the subject now utterly discard and repudiate the idea that reading and writing, with a knowledge of accounts, constitute education. The lowest claim which any intelligent man now prefers in its behalf is, that its domain extends over the threefold nature of man; over his body, training it by the systematic and intelligent observance of those benign laws which secure health, impart strength and prolong life; over his intellect, invigorating the mind, replenishing it with knowledge, and cultivating all these tastes which are allied to virtue; and over his moral and religious susceptibilities also, dethroning selfishness, enthroning conscience, leading the affections outwardly in good will toward man, and upward in gratitude and reverence to God.
—*Horace Mann.*

Facts on Time Allotments for Subjects in Elementary Schools and Junior High Schools

What a Comparison of Time Allotments Reveals

The data relative to time allotments in the Second Yearbook of the Department of Superintendence[1] present comprehensive and reliable information as to time allotted elementary school subjects in different cities. This section of the bulletin, based on the outstanding results of this study, and on additional material:

1. Furnishes a statement of current practices throughout the country as to time allotted to various subjects of the elementary school curriculum.
2. Gives an exact statement of the range of subjects taught in the elementary schools of the country.
3. Includes an accurate statement of the division of the elementary school pupil's time between various types of subjects, the Three R's, the fundamentals, special subjects, etc.
4. Reveals a tremendous amount of variation in different cities in:
   (a) Grades in which any particular subject is taught.
   (b) Amount of time given in any year or throughout the school career of a child to any one subject.

For example, it shows that one city allots twice as much time per week to the teaching of reading in one of the elementary grades as does another city of the same size. A study of two school schedules shows that one city allots 7.3 per cent of its total time in the first six grades to the teaching of arithmetic, another city allots 20.6 per cent. Some cities teach American History during the entire eight years of the elementary school; others teach it only one year.

5. Reveals the difficulties that a child encounters when he transfers from one school system to another.
6. Raises the question as to why there should be variation in time allotments and how far this variation should go.

The Why and Wherefore of Variation in Elementary Curricula

Much of the present lack of uniformity in time allotments is the result of desirable and carefully thought out experimentation in the direction of adapting curricula to differences in community make up, capacity of children, length of school term, type of school organization, etc. Lack of uniformity on this basis cannot be criticised. It is essential if the school is to be effective.

However, much of the lack of uniformity is doubtless the result of the expression of individual opinion, often unsupported by sound educational philosophy, scientific data, or knowledge of common practice. In short, it is unintelligent or accidental variation and is not conducive to greater educational efficiency. Lack of uniformity on this basis is not justified and should be eliminated insofar as conditions permit.

It is of special interest that the data reveal that the older subjects still consume more than half of each child's time. In the light of sound educational objectives it does not appear that the newer subjects are receiving undue emphasis.

The striking agreement between the data presented in this section resulting from two independent studies as to typical time allotments in the first six grades indicates the reliability of the data in the following tables.

[1] Department of Superintendence, Second Yearbook, The Elementary School Curriculum, National Education Association, 1924. pp. 139–172.

How the Elementary Pupil Spends His Time. Facts Revealed by a Study of 50 Cities

Table 4, taken from the *Second Yearbook* of the Department of Superintendence, where it is discussed at some length, is based upon a careful study of time allotments in 50 cities. It furnishes a reliable indication of the amount of time which elementary pupils devote to the seventeen subjects of the first eight grades of the elementary school.

TABLE 4.—COMPARISON OF THE TIME ALLOTMENTS IN NUMBER OF MINUTES PER WEEK BY GRADES IN THE SEATTLE SCHOOLS WITH THE AVERAGE ALLOTMENTS IN 49 LARGE CITIES

Subjects Taught		Grades								
		I	II	III	IV	V	VI	VII	VIII	Total
Language	49 Cities	130	141	167	176	187	194	207	215	1417
	Seattle	C	50	75	110	200	225	225	225	1110
Reading	49 Cities	421	404	332	245	182	141	142	136	2003
	Seattle	600	525	425	310	135	135	225	212	2567
Spelling	49 Cities	39	82	87	85	82	78	72	73	598
	Seattle	0	75	100	100	60	60	60	60	515
Penmanship	49 Cities	67	72	77	78	77	75	63	58	567
	Seattle	50	75	75	75	60	60	60	60	515
Arithmetic	49 Cities	64	143	193	206	211	211	212	211	1451
	Seattle	0	150	250	240	225	255	250	200	1570
History	49 Cities	17	19	30	54	84	97	148	167	616
	Seattle	100	30	50	75	135	135	250	125	900
Civics	49 Cities	9	12	11	12	14	15	23	27	123
	Seattle	0	30	25	25	35	30	0	75	220
Geography	49 Cities	11	14	59	137	156	162	137	84	760
	Seattle	0	0	50	100	180	180	0	112	622
Science	49 Cities	22	23	23	23	21	21	22	26	181
	Seattle	38	20	25	25	25	40	40	40	253
Hygiene	49 Cities	16	16	18	22	27	27	25	22	173
	Seattle	37	20	25	25	25	25	35	35	227
Physical Training	49 Cities	90	87	89	90	90	89	98	104	737
	Seattle	0	0	50	50	50	50	50	50	300
Supervised Play	49 Cities	22	19	18	14	16	16	16	15	136
	Seattle	150	150	100	50	50	50	50	50	650
Recess	49 Cities	105	106	106	96	91	90	84	74	752
	Seattle	100	100	100	100	100	100	100	100	800
Industrial Arts	49 Cities	22	22	25	30	50	65	90	106	410
	Seattle	25	50	63	60	60	0	0	0	258
Drawing	49 Cities	87	88	87	86	82	75	77	79	661
	Seattle	75	50	63	75	75	75	75	75	563
Music	49 Cities	71	74	74	77	76	74	70	75	591
	Seattle	75	75	75	80	80	80	80	80	625
Miscellaneous	49 Cities	97	93	99	97	99	98	88	87	758
	Seattle	0	0	0	50	50	50	50	50	250

1. Read Table 4 as follows: Forty-nine cities over 100,000 in population allot an average of 130 minutes per week to language in the first grade; these same 49 cities allot an average of 141 minutes per week to language in the second grade, etc. Seattle allots no time to language in the first grade; in the second grade she allots 50 minutes per week, etc.

2. In the above table, language includes composition and grammar; reading includes phonics, literature, stories, and dramatics; geography includes physical and commercial geography; science includes nature study and gardening; supervised study includes games; industrial arts includes handwork, wood and metal work, domestic science, etc.; and miscellaneous includes opening exercises, study, unassigned time, etc.

3. The 49 cities from which data in the above table were gathered included:

Akron, O.
Albany, N. Y.
Atlanta, Ga.
Baltimore, Md.
Birmingham, Ala.
Boston, Mass.
Bridgeport, Conn.
Buffalo, N. Y.
Cincinnati, O.
Cleveland, O.
Dayton, O.
Denver, Colo.
Des Moines, Ia.
Detroit, Mich.
Fort Worth, Tex.
Grand Rapids, Mich.
Hartford, Conn.
Indianapolis, Ind.
Jersey City, N. J.
Kansas City, Kans.
Kansas City, Mo.
Los Angeles, Calif.
Louisville, Ky.
Milwaukee, Wis.
Newark, N. J.
New Bedford, Mass.
Norfolk, Va.
Oakland, Calif.
Paterson, N. J.
Pittsburgh, Pa.
Portland, Ore.
Providence, R. I.
Reading, Pa.
Richmond, Va.
Rochester, N. Y.
San Antonio, Tex.
San Francisco, Calif.
Salt Lake City, Utah.
Scranton, Pa.
Seattle, Wash.
Spokane, Wash.
Springfield, Mass.
Syracuse, N. Y.
Trenton, N. J.
Washington, D. C.
Wilmington, Del.
Worcester, Mass.
Youngstown, O.

4. All the cities do not offer all the subjects, or do not offer them in the same grades. In that case, the time allotment is 0. For example, but 24 out of 49 cities report spelling for the first grade. In computing the average for the 49 cities, 25 cities count as 0.

Table 5 affords a better idea of the actual length of time allotments as units of a weekly program. It shows the average time allotments for the elementary subjects in the various grades. It is based on data from the same 49 cities listed under Table 4. In Table 5 the averages include only those cities which actually allot time for the subject and for the particular grade. The number of cities offering the subject is also shown for each grade. For example, only 42 of the 49 cities offer "Language" in Grade I. The average, 127 minutes per week, allotted to Language in Grade I is based on data from these 42 cities.

TABLE 5.—NUMBER OF MINUTES PER WEEK BY GRADES ALLOTTED TO ELEMENTARY SCHOOL SUBJECTS

Subjects Taught		Grades							
		I	II	III	IV	V	VI	VII	VIII
Language	Minutes	127	136	153	174	180	187	199	206
	No. Cities	42	44	45	46	47	47	41	35
Reading	Minutes	430	413	339	250	185	165	146	140
	No. Cities	47	47	47	47	47	47	47	35
Spelling	Minutes	79	87	90	89	85	82	76	73
	No. Cities	24	45	46	46	46	46	40	34
Penmanship	Minutes	74	77	78	80	79	77	68	63
	No. Cities	44	45	47	47	47	47	39	33
Arithmetic	Minutes	96	143	193	206	211	211	212	211
	No. Cities	32	48	48	48	48	48	42	36
History	Minutes	54	69	65	89	101	110	152	167
	No. Cities	15	15	22	29	40	41	41	36
Civics	Minutes	49	55	54	51	54	55	70	81
	No. Cities	9	10	10	11	12	13	14	12
Geography	Minutes	45	50	76	143	159	166	152	137
	No. Cities	12	13	37	46	47	47	38	22
Science	Minutes	49	49	52	48	48	49	54	61
	No. Cities	22	23	22	24	21	21	17	16
Hygiene	Minutes	38	39	40	41	49	48	48	40
	No. Cities	20	20	22	26	27	27	22	19
Physical Training	Minutes	102	99	99	100	100	101	98	104
	No. Cities	43	43	49	44	44	43	37	32
Supervised Play	Minutes	90	83	89	70	85	85	88	79
	No. Cities	12	11	10	10	9	9	8	7
Recess	Minutes	123	123	123	115	111	111	110	102
	No. Cities	42	42	42	41	40	40	33	27
Industrial Arts	Minutes	60	60	60	67	70	81	103	109
	No. Cities	18	18	20	22	35	39	38	36
Drawing	Minutes	91	92	91	88	83	77	79	81
	No. Cities	47	47	47	48	48	48	42	36
Music	Minutes	71	74	74	77	76	80	70	76
	No. Cities	49	49	49	49	49	49	43	36
Opening Exercises	Minutes	60	59	59	50	54	55	55	54
	No. Cities	41	41	41	42	40	40	34	31
Miscellaneous	Minutes	88	74	81	80	83	84	80	75
	No. Cities	25	28	29	31	31	30	23	19

Table 5 should be read as follows: Forty-two cities teach language in Grade I on an average of 127 minutes per week, 44 cities teach it in Grade II on an average of 136 minutes per week, etc.

AS THE list of subject courses increases, teachers feel a growing dismay at the accumulation of material. What to do to simplify the task!

Let us begin with the simple thesis that the most important subject is the child. He determines the use of all the rest. He may be dirty, overfed, able to talk fluently but not to write, well-informed on our American fathers but given to prevarication, up in arithmetic and down in spelling; or he may be just the opposite in all these characteristics.

In either case, the teacher selects her material from the appropriate subject and applies it to the need. It may be a lesson on the use of the handkerchief today, it may be our harbor—or it may be economy in the use of paper. Looking at the subjects in this way, they are helps—a rich storehouse of material to be carefully used.—*Ethel I. Salisbury, Course of Study Bulletin, Los Angeles City Schools, April 28, 1924. p. 3.*

How Is the Elementary Pupil's Time Divided?

Facts Revealed by a Study of 60 Cities

Another study, where time allotments in 60 cities for each subject in grades 1–6 were considered, showed the same lack of uniformity in time allotted to the various subjects of the elementary grades. These data are summarized in Table 6. It shows that the percentage of time allotted in one city for a particular elementary school subject is often three and four times as large as the percentage of time allotted by another city for the same subject.

TABLE 6.—TIME ALLOTMENTS IN MINUTES PER WEEK FOR THE SUBJECTS AND ACTIVITIES FOUND IN GRADES 1–6 IN THE ELEMENTARY SCHOOLS OF 60 CITIES

Subjects and activities in elementary school curricula of 60 cities	Number of cities allotting time	Total minutes per week allotted each subject in those cities offering it	Average number of minutes per week allotted in all 60 cities to each subject	Average per cent of total time of 60 cities allotted each subject	Average number of minutes per week allotted each subject in those cities offering it	Lowest per cent of total time allotted by any city	Highest per cent of total time allotted by any city
Opening exercises	50	15,199	253	2.8	304	1.2	6.7
Recess	47	34,900	582	6.5	743	3.8	14.5
Arithmetic	60	64,642	1077	12.1	1077	7.3	20.6
Art Education	59	31,638	527	5.9	536	3.0	11.6
Geography	60	32,219	537	6.0	537	3.2	10.6
Elementary Science	37	8,980	150	1.7	243	.5	5.8
History	57	17,959	299	3.4	315	.8	6.8
Language	60	59,018	984	11.0	984	6.3	17.9
Music	59	26,958	449	5.0	457	2.8	8.9
Physical Training	57	33,109	552	6.2	581	1.5	19.5
Reading	60	114,869	1914	21.5	1914	12.9	29.0
Spelling	59	28,080	468	5.2	476	2.4	8.3
Handwriting	60	28,447	474	5.3	474	2.5	7.9
Citizenship	19	4,430	74	.8	233	.5	4.6
Health Education	46	9,991	167	1.9	217	.5	4.6
Manual Arts	38	7,556	126	1.4	199	.4	5.5
Supervised Study	8	4,915	82	.9	614	.5	14.0
Unassigned Time	27	13,025	217	2.4	482	1.5	25.4
Total	60	535,935	8932	100.0	10,386	.....	.....

Read Table 6 as follows: Of the 60 cities concerned 50 report time allotted to "Opening exercises." The total time allotted by the 50 cities to opening exercises was 15,199 minutes per week, or an average of 253 minutes per week when all 60 cities were considered; 2.8 per cent is the average per cent of total time which the 60 cities allotted to opening exercises; 304 is the average number of minutes per week allotted to opening exercises by the 50 cities which had them; the lowest per cent of total time allotted by any city to opening exercises was 1.2; the highest was 6.7.

The sixty cities from which data in the above table were gathered included:

Allentown, Pa.	Fort Smith, Ark.	Richmond, Va.
Atlanta, Ga.	Fresno, Calif.	San Diego, Calif.
Baltimore, Md.	Highland Park, Mich.	Savannah, Ga.
Bayonne, N. J.	Indianapolis, Ind.	Scranton, Pa.
Bellingham, Wash.	Kansas City, Kans.	Sheboygan, Wis.
Berkeley, Calif.	Lowell, Mass.	Somerville, Mass.
Birmingham, Ala.	Madison, Wis.	Spokane, Wash.
Boston, Mass.	Mason City, Ia.	Toledo, O.
Bridgeport, Conn.	Milwaukee, Wis.	Topeka, Kans.
Buffalo, N. Y.	Missoula, Mont.	Trenton, N. J.
Cambridge, Mass.	Newark, N. J.	Troy, N. J.
Cleveland, O.	New Orleans, La.	Tucson, Ariz.
Colorado Springs, Colo.	Norfolk, Va.	Utica, N. Y.
Council Bluffs, Ia.	Passaic, N. J.	Washington, D. C.
Denver, Colo.	Pawtucket, R. I.	Waterbury, Conn.
Detroit, Mich.	Pittsburgh, Pa.	Wheeling, W. Va.
Elisabeth, N. J.	Portsmouth, N. H.	Wilmington, Del.
El Paso, Tex.	Paterson, N. J.	Worcester, Mass.
Erie, Pa.	Providence, R. I.	Yonkers, N. Y.
Everett, Wash.	Racine, Wis.	Youngstown, O.

THE TRANSFER pupil is too often demoted. It is usually reasoned that "our school environment is new," "our books and methods are different," "our standards are higher," and "the child has lost some time in moving"; therefore, "he had better enter a lower grade where he will be sure to make good." Thousands of children are thus demoted every year. . . .

The important thing for a principal or a teacher to ask about any child is "What can he do?" not "Where did he work before?" or even "What has he accomplished?" If he has not accomplished what he should, the first question to answer is "Why?" Can arrangements be made which will stimulate greater accomplishment?—*Virgil E. Dickson, Mental Tests and the Classroom Teacher, pp. 212-213.*

Table 7 is compiled from data in Tables 4 and 6. It reveals a strikingly close agreement between the time allotments in *average* number of minutes per week in subjects and activities in grades 1–6, as revealed by two independent studies, carried on with two different groups of cities.[1]

[1] The Studies referred to here and which are the basis of Tables 4 and 6, were conducted by Fred C. Ayer, director of research Seattle Public Schools, and Ray Latham, assistant superintendent, Duluth Public Schools. These studies are described in greater detail in the *Second Yearbook* of the Department of Superintendence, pp. 139–145.

TABLE 7.—COMPARISON OF TIME ALLOTMENTS FOR THE SUBJECTS AND ACTIVITIES OF GRADES 1–6 IN 60 CITIES WITH THOSE IN 49 CITIES

Subjects and Activities	Time allotments average number of minutes per week in Grades 1–6	
	60 Cities	49 Cities
Reading	1914	1725
Arithmetic	1077	1028
Language	984	995
Recess	582	594
Physical Training	552	535
Geography	537	539
Drawing or Art Education	527	505
Penmanship	474	446
Spelling	468	453
Music	449	446
History	299	301
Opening Exercises	253	.....
Unassigned or Miscellaneous	217	583
Health Education or Hygiene	167	126
Elementary Science	150	133
Manual or Industrial Arts	126	214
Supervised Play	.....	99
Supervised Study	82	.....
Civics or Citizenship	74	73
Total	**8932**	**8795**

Read Table 7 as follows: The average number of minutes in which reading is taught in all six grades in 60 cities is 1914 minutes; in 49 cities it is 1725 minutes, etc.

WHEN CONDUCT becomes an aim in education the situation becomes much more complicated and the subject material more diversified. Moreover, since conduct is specific rather than general and grows by small working units rather than by general principles, it is necessary that a great mass of detail be added. Character is built step by step under situations in which great principles effect character only by specific application to specific situations, so that the amount of material studies will need to be doubled.—*W. W. Charters, Curriculum Construction, p. 145.*

The reorganized curriculum should: (a) Make provision for children to engage in participating experiences through which they will form the habits, skills, attitudes, and methods of behavior constituting efficient growth in the desirable activities of life itself. (b) Make provisions for the fullest possible use of questions, problems, and interests of importance and of appreciable value to the children themselves from the environment and activities in which children are participating or in which they can be led to participate with profit and satisfaction. (c) Make provision for using the the race experience, the subject matter from the subjects of study, needed to carry forward these activities, and for leading to interests in new activities on higher levels. (d) Make provision for the mastery of those mechanical or technical facts and processes we call the tool subjects as the motives for these become apparent through needs for them, and as capacities are sufficiently ripened for them. (e) Make provision through the form of the organization of the work to utilize all important interrelationships of problems and elements of subject matter that duplication may be avoided and that the work may proceed in harmony with the laws of learning. (f) Make provision for that flexibility in standards of achievement, outcome, and promotions required by the individual differences of children and controlling factors of environment.—*F. G. Bonser, Official Report, Department of Superintendence, National Education Association. 1924, p. 91.*

Are the Three R's Crowded Out by Fads and Frills?

Table 8 arranges the various subjects, so as to conform with the three different groups of subjects which ordinarily appear in elementary schools, namely: the Three R's, the fundamentals, and the special subjects. It also shows the amount of time allotted in average number of minutes per week to each of these groups of subjects. The chart below shows these data graphically.

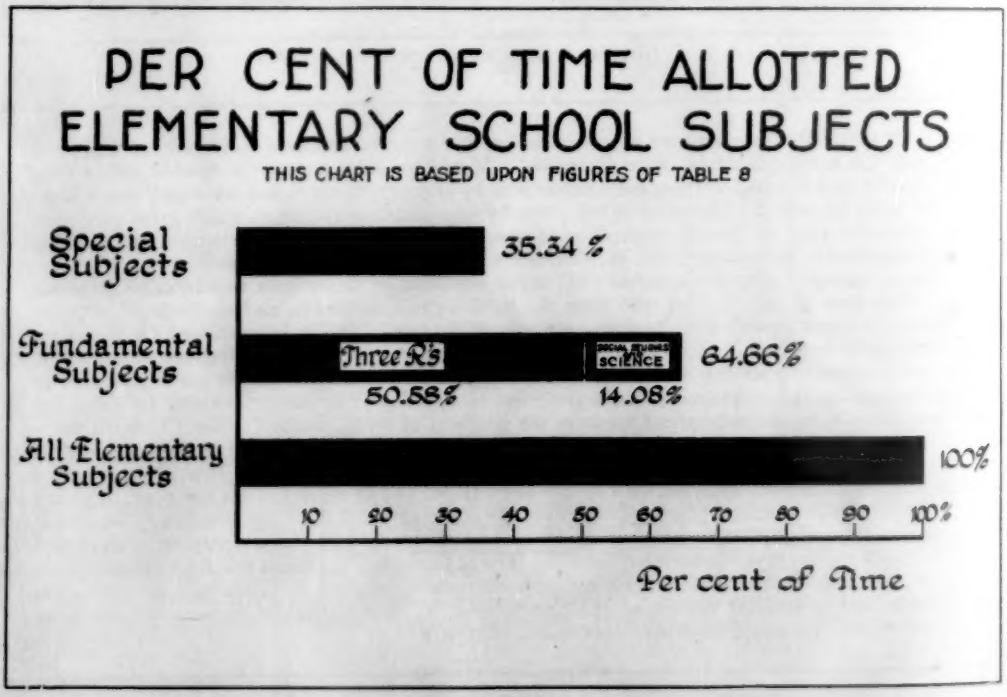
TABLE 8.—COMPARISON OF WEEKLY TIME ALLOTMENTS OF SEATTLE AND 49 REPRESENTATIVE CITIES

Subjects	Minutes Per Week Seattle	Minutes Per Week 49 Cities	Per Cent Total Time Seattle	Per Cent Total Time 49 Cities
The Three R's:				
Language, reading, spelling and writing	4707	4585	39.41	38.42
Arithmetic	1570	1451	13.14	12.16
Total Three R's	**6277**	**6036**	**52.55**	**50.58**
The Fundamentals:				
The Three R's	6277	6036	52.55	50.58
History and Civics	1120	739	9.38	6.19
Geography and Science	875	941	7.33	7.89
Total Fundamentals	**8272**	**7716**	**69.26**	**64.66**
The Special Subjects:				
Hygiene, Physical Training and Play and Recess	1977	1798	16.55	15.07
Industrial Arts and Drawing	821	1071	6.87	8.97
Music	625	591	5.23	4.95
Opening Exercises and Miscellaneous	250	758	2.09	6.35
Total Special Subjects	**3673**	**4218**	**30.74**	**35.34**
Grand Total	**11,945**	**11,934**	**100.00**	**100.00**

Table 8 derived from the totals in the last column of Table 2, should be read as follows: 4707 is the aggregate number of minutes per week allotted to language, reading, spelling, and writing in all the eight grades in Seattle.

4585 is the total of the average number of minutes per week devoted to language, reading, spelling, and writing in all the eight grades in 49 cities over 100,000 in population.

Seattle devotes 39.41 per cent of her total school time to language, spelling, and writing; the other 49 cities devote 38.42 per cent of their time to it.



The Three R's are not crowded out. In 49 of our largest cities, over 50 per cent of a child's time in the elementary school is devoted to language, reading, spelling, writing, and arithmetic. These subjects, together with history, civics, geography, and science, consume approximately two-thirds of all elementary pupils' time in the cities studied. Only one-third of their time is devoted to physical training, play, drawing, music, shop work, domestic science, etc.

Are We Giving Too Much Time to the Three R's?

Instead of blindly eliminating certain subjects from the curriculum or planning new forms of school organization in order to have more time for the Three R's, we should ask ourselves whether or not more time is necessary. Would it not be better to use the generous time that is available for these studies in such a way as to secure better results? Enough work has already been done in studying rates of learning under different conditions to demonstrate that it is often possible to reduce the time devoted to a subject and at the same time increase the child's knowledge of the subject.

There is no question that in many instances an undue amount of time is devoted to the Three R's. If scientific methods of teaching were used, the child's interest secured, and materials of instruction, fitted to the ability, interest, experience, and environment of the individual child, in many cases the hours of drill spent on the Three R's could be materially reduced. At the same time there would be an increase in the speed of learning, length of memory span, and practical application of facts learned.

Better results accomplished in a shorter period of time can only come through the efforts of trained teachers using curricula built on scientific principles.

What Does an Elementary Pupil Face When He Transfers from One City School System to Another?

Data gathered from 375 cities show wide variation in combination of grades in which elementary subjects are taught in different cities.[1] The variation in this regard is even greater than that shown in the preceding studies of time allotments stated in minutes per week.

Tables 9 to 11 show the variations and combinations of grades in which silent reading, geography, and American history are taught. In interpreting Tables 9 to 11, these points should be kept in mind:

1. Grade 1B means low first grade; grade 1A means high first grade; similarly for the other grades, B means low, and A, high.

2. In tabulating data the cities were arranged in the following groups: (1) cities with population from 8,000 up to 30,000; (2) cities with population from 30,000 up to 100,000; and (3) cities of 100,000 and over. In every case the population was based upon the 1920 census.

In the tabulations, the cities were also arranged in the following geographic groups:

Group A. Eastern (Industrial), including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Group B. Southern States, including Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Group C. Great Lakes (Manufacturing), including Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Group D. Great Plains (Agricultural), including Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, and South Dakota.

Group E. Western, including Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

The total number of cities represented varies with each table. This is due to incomplete returns from some cities.

Tables 10 and 11 give data similar to those in Table 9 for geography and history, and should be interpreted in the same way as the data on silent reading.

[1] The data referred to resulted from the *Inquiry Know and Help Your Schools*. Results are presented in greater detail on page 143 and following of the *Second Yearbook* of the Department of Superintendence.

TABLE 9.—GRADES IN WHICH SILENT READING IS TAUGHT

28 Combinations [1]

Grades	Population of Cities			Grand total	Geographical groups				
	8000–30,000	30,000–100,000	100,000 and over		Eastern	Southern	Great Lakes	Great Plains	Western
1B–8A	56	26	20	102	31	13	31	16	11
1B–7B	2			2	1				1
1B-7A	7		4	11		8		3	
1B–6A	16	10	3	29	13	4	6	4	2
1B–5A	1	1	1	3	1	1	1		
1B–4A	1		1	2		2			
1B–3B	1			1	1				
1B–3A		1		1			1		
1A-8A	11	4		15	5	2	5	1	2
1A–7A	1	1		2			2		
1A–6A	7			7	1	1	2	2	1
2B–8A	18	5	1	24	11	2	7	4	
2B–7A	2	1		3	1	2			
2B–6A	8	4		12		1	2	8	1
2B–5A		1		1					1
2A–8A	2			2	1		1		
2A–7A	1			1				1	
3B–8A	24	6	3	33	18	1	8	5	1
3B–7B		1		1	1				
3B–7A	1			1				1	
3B–6A	7	3		10	2	1	5		2
3B–5A	1			1				1	
4B–8A	19	5	1	25	10	2	9	1	3
4B–7A	2			2		1		1	
4B–6A	3			3	3				
5B–8A	6			6	2		3		1
6B–8A	4			4	4				
6A–8A	1			1	1				
Total	**202**	**69**	**34**	**305**	**107**	**41**	**83**	**48**	**26**

Read Table 9 as follows: Of the 102 cities which reported that silent reading was taught in all grades from 1B–8A, 56 were from 8,000 up to 30,000 in population; 26 were from 30,000 up to 100,000; and 20 were over 100,000. Thirty-one of these cities were in the Eastern geographical group; 13, Southern; 31, Great Lakes; 16, Great Plains; and 11, Western.

[1] In the 305 cities reporting on the teaching of silent reading, there were 28 combinations of grades in which silent reading was taught.

TABLE 10.—GRADES IN WHICH GEOGRAPHY IS TAUGHT

28 Combinations

Grades	Population of cities			Grand total	Geographical groups				
	8000–30,000	30,000–100,000	100,000 and over		Eastern	Southern	Great Lakes	Great Plains	Western
1B–8A	8	2	2	12	6		3	2	1
1B–7A	4	2	2	8		4	3		1
1B–6A	4	4		8	3	2	1		2
1A–8A	2			2	1		1		
2B–8A	3	1		4	3		1		
2B–7A	3	2		5	1	1	1	2	
2B–6A		1		1	1				
2A–6A	1		1	2	1	1			
3B–8A	30	11	10	51	24	6	8	5	8
3B–8B	4	2	1	7	2	1	1	1	2
3B–7A	16	11	4	31	8	2	15	5	1
3B–7B	3	1	2	6	2		2	1	1
3B–6A	18	6	3	27	7	4	6	7	3
3A–8A	4	3		7	3	1	2		1
3A–8B		1	1	2	2				
3A–7A	2	1	1	4		2	1	1	
3A–7B	2			2			1	1	
3A–6A	18	6	1	25	6	3	6	7	3
4B–8A	39	9	9	57	32	3	14	4	4
4B–8B		1		1		1			
4B–7A	38	9	2	49	4	10	21	10	4
4B–6B	1			1				1	
4A–8A	3	1		4	3		1		
5B–8A	3			3	1	1	1		
5B–8B	1			1		1			
5B–7A	2			2	1		1		
5B–6A			1	1		1			
3B–7B & 8A		1		1			1		
Total	**209**	**75**	**40**	**324**	**111**	**44**	**91**	**47**	**31**

TABLE 11.—GRADES IN WHICH AMERICAN HISTORY IS TAUGHT

59 Combinations

Grades	Population of cities			Grand total	Geographical groups				
	8000–30,000	30,000–100,000	100,000 and over		Eastern	Southern	Great Lakes	Great Plains	Western
1B–8A	7	5	3	15	6		4	1	4
1B–7A	1			1					1
1B–6A	7	3		10	5	2	3		
1B–2A 5B–5A 7B–8A	1			1					1
1A–8A	1			1			1		
1A–7A	1			1				1	
2B–8A	1	3		4	3		1		
2B–6A		1		1	1				
2B–5A 7B–8B	1	1		2	1		1		
3B–8A	8	7	2	17	8		2	2	5
3B–8B	2			2		1	1		
3B–7A	1			1			1		
3B–6A	2			2	1				1
3B–5A	1			1	1				
3B–4A 7B–8A	1			1	1				
3A–8A	4	1		5	3	1	1		
3A–6A			1	1	1				
3A, 5A & 7B–7A	1			1		1			
4B–8A	37	6	3	46	25	3	13	2	3
4B–8B	1		1	2	1			1	
4B–6A 8B–8A 4B–5A	1			1			1		
7A–8A		1		1	1				
4B–5A 7B–8A 4B–5A	1			1	1				
7B–7A	2			2		1		1	
4B–5A & 7B		1		1	1				
4B–6A		2	1	3	1		1	1	
4B–5A	1		1	2			1	1	
4B–4A		1		1			1		
4A–8A	4	1	1	6	3		1	1	1
4A–8B	2			2		1	1		
4A–5A		1		1	1				
5B–8A	32	11	11	54	28	5	14	4	3
5B–8B	2			2	1	1			
5B–7A	5		4	9		8		1	
5B–6B 7A–8A 5B–5A	1			1					1
8B–8A 5B–5A	1			1				1	
7B–8A 5B–5A	4	1		5	1	1	1	1	1
7B–7A	1	2		3	1		1	1	
5B–5A & 7B	1			1	1				
5B–5A & 6A	1			1			1		
5B–6A	10			10	5		2	1	2
5B–6B		1		1		1			
5B & 7B–7A	1			1		1			
5A–8A	1	1		2		1		1	
5A–7A	1			1		1			
6B–8A	19	2		21	2	1	10	4	4
6B–8B	2	1		3			1	2	
6B–7A	1	2		3		2	1		
6B–6A 8B–8A	1			1			1		
6A–8A	1	1	1	3			1	1	1
6A–8B	2			2			1	1	
6A–7A		2		2		1	1		
6A & 8B–8A	1			1			1		
7B–8A	10	5	5	20	7	2	7	3	1
7B & 8B–8A		1		1				1	
7B–8B	5	2	2	9	1	2	3	3	
7B–7A	2	2		4		3	1		
7A–8A	1	2	1	4			2	2	
7A–8B	1			1			1		
Total	196	70	37	303	112	40	84	38	29

Similar tables for seventeen elementary school subjects are found in the 1924 Yearbook of the Department of Superintendence of the National Education Association. The findings have been partially summarized in Table 12.

Wide as are the combinations of grades in which elementary school subjects are taught as revealed in Table 12, they do not represent the entire spread of variability. For in this table only those combinations of grades are listed which exist in *five* or more

TABLE 12.—GRADE COMBINATIONS FOR ELEMENTARY SUBJECTS FOUND IN 5 OR MORE CITY SCHOOL SYSTEMS OUT OF A TOTAL OF 375

Grades	Silent Reading	Oral Reading	Language & Composition	Grammar	Spelling	Arithmetic	Geography	Hygiene	Penmanship	American History	Civics	Music	Drawing	Physical Education	Sewing	Cooking	Woodwork
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1B–8A	102	195	154	13	133	142	12	85	170	15	31	236	214	192	.....	.....	.....
1B–7A	11	25	10	.....	8	16	8	7	26	.....	.....	21	26	17	.....	.....	.....
1B–7B	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1B–6A	29	72	42	.....	27	28	8	23	43	10	15	45	49	42	.....	.....	.....
1B–5A	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1B–4A	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1B–3A	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1A–8A	15	.....	.....	.....	40	41	.....	.....	22	.....	.....	.....	.....	.....	.....	.....	.....
1A–6A	7	.....	.....	.....	10	12	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....
2B–8A	24	.....	10	.....	54	48	.....	7	18	.....	.....	.....	6	.....	.....	.....	.....
2B–7A	.....	.....	.....	.....	11	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2B–6A	12	.....	6	.....	13	11	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....
3B–8A	33	.....	39	8	5	.....	51	15	8	17	.....	.....	.....	5	.....	.....	.....
3B–8B	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3B–7A	.....	.....	6	.....	.....	.....	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3B–7B	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3B–6A	10	.....	6	.....	.....	.....	27	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
3A–8A	.....	.....	.....	.....	.....	.....	7	.....	.....	5	.....	.....	.....	.....	.....	.....	.....
3A–6A	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4B–8A	25	.....	5	14	.....	.....	57	33	.....	46	7	.....	.....	.....	10	.....	7
4B–7A	.....	.....	.....	.....	.....	.....	49	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
4B–6A	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	5	.....	.....
4A–8A	.....	.....	.....	5	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....
5B–8A	6	.....	.....	30	.....	.....	.....	15	.....	54	17	.....	.....	.....	.....	10	23
5B–7A	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	7	.....	5
5B–5A	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....
7B–8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5B–6A	.....	.....	.....	6	.....	.....	.....	5	.....	10	.....	.....	.....	.....	15	5	12
5A–8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....
6B–8A	.....	.....	.....	69	.....	.....	.....	6	.....	21	13	.....	.....	.....	31	29	65
6B–7A	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	5	.....
6B–6A	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	7
6A–8A	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7B–8A	.....	.....	.....	81	.....	.....	.....	7	.....	20	43	.....	.....	.....	39	61	70
7B–8B	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....
7B–7A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	15	.....
8B–8A	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	53	.....	.....	.....	15	62	19
8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	.....	.....	.....	.....	.....

Table 12 should be read as follows: 102 cities out of 375 teach silent reading throughout all the grades from low first through the high eighth; 195 cities teach oral reading in these same grades; 154 cities, language and composition; 13 cities, grammar, etc. From grades 1B–7A, 11 cities teach silent reading; nowhere is it taught from grades 1B–7A inclusive; 29 cities teach it from 1B–6A, etc.

city school systems. Many different combinations exist in from one to four cities throughout the United States.

Table 13 shows the entire number of combinations of grades in which each of the 17 subjects of the elementary curriculum are taught as summarized from replies from 375 cities.

What Does a Junior High School Pupil Face When He Transfers from One City School System to Another?

The *Second Yearbook* of the Department of Superintendence of the National Education Association also presents an extensive study of the combinations of grades in the junior high schools of 375 cities in which various subjects are elective and required. This study shows the almost complete lack of uniformity between junior high school programs of different city school systems. The findings are summarized in Tables 14 and 15.

TABLE 13.—NUMBER OF COMBINATIONS OF GRADES IN WHICH 17 ELEMENTARY SCHOOL SUBJECTS ARE TAUGHT IN GRADES 1-8

Subject	Number of Combinations of Grades in Which Subject is Taught
Hygiene	62
American History	59
Civics	46
Sewing	37
Language and Composition	30
Geography	28
Silent Reading	28
Cooking	26
Grammar	24
Penmanship	22
Spelling	21
Arithmetic	21
Wood-work	20
Physical Education	16
Drawing	16
Oral Reading	15
Music	13

Table 13 should be read as follows: In elementary schools, grades 1 to 8, of the cities replying there are 62 combinations of grades reported in which hygiene is taught; for American history, 59 combinations, etc.

TABLE 14.—GRADE COMBINATIONS IN WHICH JUNIOR HIGH SCHOOL SUBJECTS ARE REQUIRED AND ELECTIVE IN 5 OR MORE CITY SCHOOL SYSTEMS OUT OF A TOTAL OF 375

Junior High School Subjects	6B-9A		6B-8A		6B-8B		6B-7A		6B-6A		7B-9A		7B-8A		7B-8B		7B-7A		7B		7A-8A		7A-8B		8B-9A		8B-8A		8B		8A-9A		8A		9B-9A	
	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E	R	E
Reading	21	...	22	...	...	...	6	...	...	...	22	...	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Language and Composition	38	...	16	...	...	...	5	...	...	...	34	...	32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grammar	16	...	15	...	...	...	5	...	...	...	35	...	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spelling	17	...	25	...	...	...	6	...	6	...	20	1	41	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Geography	...	...	11	...	6	...	33	...	...	...	...	...	16	...	7	...	31	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Physiology	7	...	14	...	...	...	8	...	5	...	5	...	23	1	...	...	11	1	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...
Civics	...	...	9	...	...	...	...	...	...	...	...	...	29	...	...	...	...	...	...	...	...	...	...	...	...	...	18	3	...	...	5	...	19	2	8	4
Penmanship	8	...	18	...	...	...	10	...	12	...	7	5	34	1	...	...	7	1	...	...	...	...	...	...	...	...	2	8	...	...	...	...	...	...	...	12
Music	7	...	27	...	...	...	6	...	7	...	14	9	34	5	...	...	...	...	...	...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	1	25
Drawing	7	...	23	...	...	...	9	...	7	...	2	9	38	8	...	...	4	1	...	...	...	...	...	...	1	8	2	3	...	...	...	...	...	...	1	24
General Mathematics	...	...	...	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1	...	...	...	...	...	...	2	4
Arithmetic	6	...	31	...	...	...	7	...	5	...	...	...	39	1	6	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
Commercial Arithmetic	...	...	...	...	...	...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	2	9	3	5	...	...	...	...	...	...	2	36
Algebra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	3	10	4	...	...	7	1	4	1	29	25
Geometry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...
American History	...	...	30	...	...	...	...	...	...	...	...	...	37	...	7	...	...	...	...	...	10	...	5	2	...	...	16	...	...	...	...	...	...	...	...	...
Ancient History	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	28
Mediaeval History	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	11
Modern History	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	9
Latin	...	...	...	...	...	...	...	...	...	...	14	2	9	...	...	...	...	...	...	...	...	...	...	...	...	16	...	...	...	...	1	6	...	...	7	36
French	...	...	...	...	...	...	...	...	...	...	13	2	9	...	...	...	...	...	...	...	...	...	...	...	1	17	...	7	...	...	...	...	...	...	1	26
Spanish	...	...	...	...	...	...	...	...	...	...	10	1	4	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	13
German	...	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nursing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	6
Calisthenics	28	...	8	...	...	...	...	...	...	...	29	2	24	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5
Athletics	7	5	...	...	...	...	...	...	...	...	13	13	7	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sanitation	7	...	...	...	8	1	...	...	...	...	5	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
General Science	...	...	...	...	...	...	4	1	...	...	6	...	6	...	...	...	2	4	...	...	...	...	...	...	...	...	29	13	...	...	...	...	...	...	15	37
Biology	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	9
Botany	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Commercial Geography	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	3	...	...	...	...	4	2	2	13
Physiography	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	8
Woodwork	...	...	15	...	...	...	...	...	...	...	5	10	47	6	...	...	10	1	...	...	...	...	...	...	2	8	5	4	...	...	...	...	...	...	1	43
Typewriting	...	...	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	...	...	21
Stenography	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...	...	...	...	...	...	...	1	16
Bookkeeping	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	1	6	...	...	4	18
Printing	...	...	...	...	...	...	...	...	...	...	1	5	5	7	...	...	...	...	...	...	...	...	...	...	4	7	1	4	...	...	...	...	...	...	1	14
Sheet Metal Work	...	...	...	...	...	...	...	...	...	...	1	4	4	1	...	...	...	...	...	...	...	...	...	...	5	4	...	...	...	...	...	...	...	...	2	8
Sewing	5	...	14	1	...	...	8	...	...	...	5	7	28	7	...	...	27	...	...	...	...	...	...	...	...	5	3	4	...	...	...	...	...	...	2	42
Cooking	...	...	8	...	...	...	...	...	...	...	8	6	29	10	...	...	8	...	...	...	...	...	...	...	2	6	31	5	...	...	...	...	...	...	2	40

Read Table 14 as follows: Reading is a required (R) junior high school subject in 21 cities in grades 6B-9A; no city reported it elective (E) in these grades; in grades 6B-8A, it is required (R) in 22 cities, etc. Language and composition are required (R) in 38 cities in grades 6B-9A; in none of the 375 cities studied were these subjects elective (E) in grades 6B-9A.

Wide as is the variation of the combinations of grades in which junior high school subjects are "elective" and "required," as revealed in Table 14, it does not represent the entire spread of variability. For in this table only those combinations of grades are listed which exist in *five* or more city school systems. Many different combinations exist in from one to four cities throughout the United States. In these cities additional subjects are also often found.

Table 15 shows the entire number of combinations of grades in which 50 junior high school subjects are taught as summarized from replies from 375 cities.

What Is Most Needed in Curriculum Revision?

The data in this section plead the necessity of creating machinery whereby those who draft our curricula and distribute pupils' time may have the effective help that would result from readily available information as to:

1. Best prevailing practice.
2. Results of sound experimentation in places where advanced work is being done.
3. Scientific data relative to the capacity, interests, and environment of the individual children to be taught—upon which evidence any sound curriculum practice needs to be based.
4. New interpretation of the social objectives so that curricula may be best adapted to community, State, and National needs.
5. Analysis of best scientific research studies, indicating minimum essentials in functional content.

TABLE 15.—NUMBER OF COMBINATIONS OF GRADES IN WHICH 50 JUNIOR HIGH SCHOOL SUBJECTS ARE TAUGHT IN GRADES 6-9 IN 375 CITIES

Subject	Number of combinations of grades in which subject is taught
Sewing	25
Physiology	22
Civics	22
Cooking	20
Wood Working	19
American History	19
General Science	18
Arithmetic	17
Penmanship	17
Music	17
Geography	16
Drawing	16
Physical Education	16
Spelling	15
Reading	14
Athletics	14
Commercial Geography	13
Grammar	13
Sanitation	13
Printing	12
Calisthenics	12
Bookkeeping	12
Latin	12
Language and Composition	11
Algebra	11
Sheet Metal Work	10
Commercial Arithmetic	10
General Mathematics	9
Geometry	8
French	8
Spanish	8
Nursing	8
Typewriting	7
Ancient History	7
English History	7
Sex Hygiene	7
Stenography	7
Mediaeval History	6
Agriculture	6
Physiography	6
Biology	5
Modern History	4
General History	4
German	4
General Shop	3
Zoology	2
Botany	2
Mechanical Drawing	2
Salesmanship and Advertising	1

Table 15 should be read as follows: In the junior high schools of 375 cities, there are 25 combinations of grades in which sewing is taught; physiology, 22 combinations, etc.

THE TIME SCHEDULE. When the junior high school plan was first adopted in Rochester, the school day of six hours was divided into four periods of ninety minutes each. On days when school activities (assembly program, student clubs, class meetings, and the like) took place, each period was shortened to provide the necessary time for these activities. The next step in the development of the junior high school day was to make four regular periods of eighty minutes each, with a definite short period of thirty-five minutes for school activities. This plan also failed to provide the necessary flexibility. The latest plan, the one now in use in all the junior high schools, divides the school day into six periods of sixty minutes each. It allows one period for class meetings and faculty meetings. Shop and homemaking courses are still provided for on the ninety-minute period plan.—*The Junior High Schools of Rochester, New York. Report Prepared by the Rochester Junior High School Council. 1923. p. 75.*

Vote of Expert Opinion—Most Helpful Books on Curriculm Problems

The results of such scientific work as has been done in the development and revision of elementary and secondary school curricula have been concentrated by leaders in this field into a number of textbooks on the curriculum. Future progress in the shaping of America's public school curricula, if it is to be most intelligent, should consider the foundational work which has been gathered together and summarized in these studies.

As an aid to those upon whom the responsibility of curriculum revision rests, this section presents a list of texts selected on the advice of 25 representative educators. Letters were sent to this group, asking them to list the twelve books dealing with elementary or secondary curricula which they had found most helpful. Sixteen curriculum specialists[1] and 9 city and State superintendents, or members of their staff in charge of curriculum problems,[2] who had recently revised their courses of study replied.

Table 17 is a compilation of their answers.

Those who replied selected their lists with care, as illustrated by the work of one superintendent. To select the twelve best books on the curriculum, he asked the nineteen chairmen of the Elementary and Secondary Course of Study Committees of his city to hand in a list of books which they had found most helpful in their work. From this list were taken the twelve which were mentioned most often. They are listed in Table 16.

TABLE 16.—BOOKS MOST HELPFUL TO CHAIRMEN OF COURSE OF STUDY COMMITTEES IN ONE CITY

Title	Author
The Elementary School Curriculum	Bonser
The Curriculum	Bobbitt
Child Life and the Curriculum	Meriam
How to Organize the Curriculum	McMurray
Elementary School Standards	McMurray
Minimum Course of Study	Moore
Curriculum Construction	Charters
The Junior High School	Briggs
The Child and the Curriculum	Dewey
A Project Curriculum	Wells
Curriculum Making in Secondary Schools	Clement
Problems in Secondary Education	Snedden

Since the influences, which may have resulted in the choice of these particular books, are not known, the place in the list that any particular book has is not so important, as is the fact that it is one of the twelve books most frequently mentioned. It is also significant that nine of these twelve books are also among the twelve most frequently mentioned by the 25 contributors whose lists are summarized in Table 17.

The succeeding section may therefore be accepted as:

1. A list of books now in existence that compile the best current curricular practice.

2. An indication of the most helpful books in this field, from the total supply available. Of those books that are most frequently mentioned, a brief review is given to aid busy school people engaged in curriculum revision.

The first 11 books in Table 17 were

[1] This group of curriculum specialists included: John S. Alger, president, Rhode Island College of Education; Fred C. Ayer director of research, Seattle Public Schools; J. F. Bobbitt, Department of Education, University of Chicago; F. G. Bonser, Teachers College, Columbia University; Thomas H. Briggs, Teachers College, Columbia University; J. A. Clement, School of Education, Northwestern University; William S. Gray, dean of the College of Education, University of Chicago; Arleigh C. Griffin, director of High School Research, Los Angeles; Ernest Horn, College of Education, State University of Iowa; James F. Hosic, Teachers College, Columbia University; H. G. Lull, director of Teacher Training, Kansas State Teachers College; C. A. Phillips, acting president, Central Missouri State Teachers College; Ethel I. Salisbury, director of Course of Study, Los Angeles; J. B. Sears, Department of Education, Stanford University; and G. M. Wilson, School of Education, Boston University.

[2] Among these school administrators were: A. S. Barr, assistant director in charge of supervision, Detroit; William J. Bickett, superintendent of schools, Trenton; Edwin C. Broome, superintendent of schools, Philadelphia, Pa.; C. E. Douglass, assistant superintendent of schools, Baltimore, Md.; John M. Foote, rural school supervisor, State Department of Education, Louisiana; James M. Glass, director of junior high schools, State Department of Education, Pennsylvania; Margaret Madden, chairman, Education Committee, The Chicago Principals' Club; Worth McClure, assistant superintendent of schools, Seattle, Washington; H. B. Wilson, superintendent of schools, Berkeley, Calif.

mentioned from 9 to 24 times by the 25 educators, submitting lists of the 12 most helpful books on the curriculum. The remaining 48 books were mentioned from 1 to 8 times.

TABLE 17.—HELPFUL BOOKS ON ELEMENTARY AND SECONDARY SCHOOL CURRICULA SELECTED ON THE JUDGMENT OF 25 EDUCATORS

Title	Author	Publisher	Year of Publication
Curriculum Construction	Charters	Macmillan	1923
Elementary School Curriculum	Bonser	Macmillan	1922
The Curriculum	Bobbitt	Houghton Mifflin	1918
Child Life and the Curriculum	Meriam	World Book Co	1921
Curriculum Making in Secondary Schools	Clement	H. Holt & Co	1923
How to Make a Curriculum	Bobbitt	Houghton Mifflin	1924
How to Organize a Curriculum	McMurray	Macmillan	1923
Minimum Course of Study	Moore	Macmillan	1923
Yearbooks	National Society for Study of Education	Public School Publishing Co.	1918–1923
An Experiment with a Project Curriculum	Collings	Macmillan	1923
A Project Curriculum	Wells	Lippincott	1921
Curriculum Making in Los Angeles	Bobbitt	Univ. of Chicago Press	1922
The Child and the Curriculum	Dewey	Univ. of Chicago Press	1902
Principles of Secondary Education	Inglis	Houghton Mifflin	1918
A Conduct Curriculum for the Kindergarten and First Grade.	Burke	Scribner's	1923
Democracy and Education	Dewey	Macmillan	1916
The Junior High School	Briggs,	Houghton Mifflin	1920
Modern Methods and the Elementary Curriculum	Phillips	Century	1923
School and Society	Dewey	Univ. of Chicago Press	1915
The Elementary School Curriculum 1924 Yearbook	Department of Superintendence.	National Education Association.	1924
Re-direction of Secondary Education	Lull and Wilson	Lippincott	1921
Sociological Determination of Objectves in Education	Snedden	Lippincott	1921
Problems in Secondary Education	Snedden	Houghton Mifflin	1917
Cardinal Principles of Secondary Education	Committee on the Reorganization of Secondary Education	Bureau of Education	1918
High School Courses of Study	Davis	World Book Co	1914
Junior High School Education	Davis	World Book Co	1924
Home and Community Life	Hartman	E. P. Dutton	1923
The Junior High School	Koos	Harcourt, Brace & Howe	1920
Elementary School Standards	McMurray	World Book Co	1913
The Development of High School Curricula in the North Central States from 1860 to 1918.	Stout	Univ. of Chicago Press	1921
Educational Sociology	Snedden	Century	1922
Scientific Determination of the Content of the Elementary School Course in Reading.	Uhl	Univ. of Wisconsin	1921
The Junior High School Idea	Van Denburg	H. Holt & Co	1922
Survey of the Social and Business Usage of Arithmetic	Wilson	Columbia Univ	1919
Spelling Vocabularies of Personal and Business Letters	Ayers	Russell Sage	1913
Rural Education	Brim	Macmillan	1923
Methods of Teaching	Charters	Row, Peterson	1912
Course of Study in Grammar Based Upon the Grammatical Errors of School Children in Kansas City.	Charters and Miller	Univ. of Missouri	1915
Education for Efficiency	Davenport	Heath	1909
Schools of Tomorrow	The Deweys	E. P. Dutton	1915
Changes Needed in Secondary Education	Eliot	Board of Education, New York City.	1916
A Modern College and a Modern School	Flexner	Doubleday Page	1923
Present Curriculum Practices in the Junior High School	Glass	Univ. of Chicago Press	1924
Grammar by Practice	Hoyt	Scribner's	1922
Psychology of High School Subjects	Judd	Ginn	1915
How to Teach the Fundamental Subjects	Kendall and Mirick	Houghton Mifflin	1915
The Administration of Secondary School Units	Koos	Univ. of Chicago Press	1917
The Child's Mind and Common Branches	La Rue	Macmillan	1924
Report of the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools.	Consultative Committee.	H. M. Stationery Office, London.	1923
Types of Elementary Teaching and Learning	Parker	Ginn & Co	1923
Making a High School Program	Richardson	World Book Co	1921
Principles of Curriculum Making	Salisbury	Board of Education, Berkeley, Calif.	1921
The Organization and Curricula of Schools	Sleight	Edward Arnold Co., London.	1920
The Project Method in Teaching	Stevenson	Macmillan	1921
The Peoples School	Weeks	Houghton Mifflin	1912
Motivation of School Work	Wilson and Wilson	Houghton Mifflin	1916
Modern Methods of Teaching	Wilson, Kyte and Lull	Silver, Burdett	1924
Studies in Secondary Education (I) Supplementary Educational Monograph No. 24.		Univ. of Chicago Press	1923

Selected and Annotated Bibliography

The fact that some of these books are more recent than others, and hence not so well known, undoubtedly accounts for their not being mentioned more often. Another factor that must be remembered is that some are more specialized than others and hence are not those which first come to mind when one is making a list of books, dealing with general curriculum problems. Therefore, the number of times that any one particular book is mentioned should not be given too much weight.

As an aid to those dealing with general curriculum problems, a number of the books in Table 17 are briefly reviewed.

CHARTERS, W. W. *Curriculum Construction.* N. Y., Macmillan, 1923. 352 pp.

Takes the point of view that the content of school subjects does not fulfill the functions of popular education. Sets forth a theory of curriculum construction in which the aims of education are stated in both ideals and activities.

The author has made a valuable contribution in bringing together and interpreting a number of isolated research studies in each of the following elementary school subjects: spelling (8 studies), language and grammar (14 studies), mathematics (8 studies), history (5 studies), geography (4 studies), vocational courses (5 studies), and nine miscellaneous studies.

The summaries of these studies include citations to original sources where the complete printed materials may be found. The methods used in each study are carefully described and conclusions summarized. It is a timely contribution in that it formulates the objective methods used by curriculum builders.

BONSER, FREDERICK GORDON. *The Elementary School Curriculum.* N. Y., Macmillan, 1922. 466 pp.

In the first eight chapters the author has attempted the development of fundamental principles of curriculum selection, related vitally on the one hand to the aims and activities of life, and on the other to the nature and needs of children. The second part of the book makes application of these principles in offering a suggestive curriculum which may be adapted to the needs of elementary schools, wherever they may be. The reorganization of the curriculum wholly upon the "project" basis is the ideal toward which the book points. Projects for each subject in each grade are included—in other words, a "project curriculum" is outlined.

BOBBITT, FRANKLIN. *The Curriculum.* Boston, Hougton Mifflin, 1918. 295 pp.

An introductory textbook in the theory of curriculum formulation. The author's point of view is that an educational program, never designed for the present day, has been inherited, and that it fails to meet present social conditions. He presents the theory, which he thinks is needed for the curriculum revision of this new age, sets forth some of the recent educational tendencies, and considers curriculum problems from the point of view of social needs. Educational experience on both the play and work level is discussed, as is also training for occupational efficiency, education for citizenship, physical efficiency, leisure occupations, and social intercommunication.

MERIAM, JUNIUS L. *Child Life and the Curriculum.* Yonkers, N. Y., World Book Co., 1921. 538 pp.

Analyzes child life and present-day economic and social activities and shows how the former may be developed to carry on the latter successfully. The point of view taken throughout the volume is how to help boys and girls do better in all those wholesome activities in which they normally engage. According to the author, the book is virtually a report upon the actual conduct of a school for twelve years.

CLEMENT, JOHN ADDISON. *Curriculum Making in Secondary Schools.* N. Y., Holt, 1923. 534 pp.

A dynamic and functional point of view relative to secondary school curriculum making is set forth. English, social science, and natural sciences, together with such material in other subjects as functions in fundamental activities, are proposed as the core of secondary curricula.

A pertinent list of practical questions and problems introduces each of the twenty-one chapters. The discussion which follows, together with the selected bibliography at the end of each chapter, offer much suggestive material.

Outstanding tendencies in curriculum revision relative to reconstructed courses in English, history, and other social sciences, natural science, mathematics, foreign languages, practical and fine arts, and physical education are set forth in detail. Illustrative examples of revised subject courses based upon the newer objectives form a large share of the book. Chapters dealing with the adaptation of subject matter and of instruction to individual differences, and the personnel pupil groups suggest the possibility of "pupil-centered curricula."

BOBBITT, FRANKLIN. *How to Make a Curriculum.* Boston, Houghton Mifflin, 1924. 292 pp.

Plan of approach to the problems of curriculum improvement employed in Los Angeles. It presents a constructive and adaptable plan of procedure for curriculum-making groups, who want to determine first-hand the educational goals for their school system and pupil activities for attaining them. Briefly the plan is first to determine without reference to subject courses or departments, a comprehensive list of abilities needed by men and women. Then the principle is applied that "almost every objective of education can be stated as the ability to do something whether subjective or objective." The next step is to plan the series of *types* of pupil activities and experiences for each of the grades. Which of these can each department best provide? In answering this question the function of the natural sciences, mathematics, social studies, music, art, etc., in modern community life is clearly defined in terms of abilities to be developed in the people.

The advantage of this new approach to curriculum building is that a course of study so constructed will not contain "dead-wood" because the abilities which are to be developed have been determined on the basis of human needs. Differences in individual capacities of pupils are provided for by making selections from the comprehensive list of abilities and characteristics which are appropriate for pupils of large capacity. The point is emphasized that "a different set of minimum essentials needs to be formulated for each ability class."

McMURRAY, CHARLES A. *How to Organize a Curriculum.* N. Y., Macmillan, 1923. 358 pp.

Suggests a positive basis for reorganization of elementary studies into large units through typical life projects, which show fundamental connections between subjects and develop organized thinking. Outlines a suggested curriculum for grades four to eight, inclusive; in which studies are reorganized around central teaching units, covering the fields of geography, history, science, and literature. The following topics are illustrative: The Louisiana Purchase, an example of aggressive appropriation of new territory; and India, a typical project in British colonial expansion. The present course of study is abbreviated by expanding its big topics; in other words, by giving full scope to a few organizing principles.

MOORE, ERNEST C. *Minimum Course of Study.* N. Y., Macmillan, 1923. 402 pp.

The school superintendents of nine cities of southern California joined in a study of minimum essentials in elementary education. They appointed a series of committees whose membership included classroom teachers from each superintendent's staff. There was one committee to study and report upon each subject in the elementary course. This book is a compilation of the reports of these committees. It is of interest because it is an effort of classroom teachers to study their job and formulate and strive to attain their objectives.

NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. *Yearbooks—Fourteenth, Sixteenth, to Nineteenth and Twenty-Second.* Bloomington, Ill., Public School Publishing Co., 1918–1923.

The Fourteenth, Sixteenth, Seventeenth, and Eighteenth Yearbooks of the National Society for the Study of Education contain four annual reports of the Committee on Economy of Time in Education. Minimum essentials in elementary school subjects as well as standards and current practices are clearly set forth.

The Nineteenth and Twentieth Yearbooks discuss new materials of instruction for kindergarten, elementary grades, and junior high school. Of special interest are the carefully described projects which teachers in many sections of the country have worked out in their classrooms.

Part II of the Twentieth Yearbook is a Report of the Society's Committee on Silent Reading. The Twenty-Second Yearbook is devoted to English Composition, its aims, methods, and measurement and to the Social Studies in the Elementary and Secondary school. The aims and objectives of these subjects are defined and the methods by which they may be realized are described. All of these Yearbooks point the way to more scientific curriculum making, and are full of illustrations of the best current practices.

COLLINGS, ELLSWORTH. *An Experiment with a Project Curriculum.* N. Y., Macmillan, 1923. 346 pp.

Report of an experiment in rural school curriculum making, based on the concept of *project method.*

The book reports an experiment covering a period of four years. Three typical rural schools in Missouri were selected for the experiment. One was used as an Experimental school, the other two as Control schools. In the Experimental school it was proved that a country school curriculum can be selected directly from the purposes of boys and girls in real life. In this study, the curriculum was made up of excursion, hand, play, and story projects. Complete lists of these are given. At the end of four years measurement of results showed the Experimental school exceeded the Control schools in pupils' achievement in common facts and skills, attitudes, and conduct; greater improvement was also shown in parents' interest and community progress. Growth in character, habit formation, and improved conduct are measured by a unique series of checks.

WELLS, MARGARET ELIZABETH. *A Project Curriculum.* Philadelphia, Lippincott, 1921. 338 pp.

An interpretation of the project method which lays emphasis upon the selection of a major project for each grade, large enough to provide a basis for most of the work of that entire grade. Details for the full work of the first three grades are developed, and the general outline of the work for the fourth, fifth, and sixth grades is indicated. The major projects are as follows: first grade—Playing Families; second grade—Playing Store; and third grade—Playing City.

The author has attempted the formulation of a curriculum which would answer life's demands by reproducing life situations in which the pupils would continually be the actors in the same play for a year. The written account of the experiment is helpful in that it is suggestive for the development of other projects.

Section III includes a brief compilation of the outstanding principles of curriculum making which have been proposed by creative educational thinkers.

BOBBITT, FRANKLIN. *Curriculum Making in Los Angeles.* Supplementary Educational Monograph No. 20. Chicago, Ill., University of Chicago, June, 1922. 106 pp.

Statement of the technique of curriculum re-examination and reformation as carried out by the teachers of Los Angeles. This monograph contains one of the most comprehensive lists of human abilities and characteristics desirable in present-day citizens that has yet been published. From this comprehensive list those generally needed abilities and characteristics which require development through school training, are selected as the aims and objectives of education. These several hundred objectives are listed in the monograph and classified under ten headings. They are again reclassified—since each department of the Los Angeles school system checked through the comprehensive

es of abilities and selected those abilities which h department should assist the pupils to achieve. ese lists of abilities, which Los Angeles teachers of glish, history, mathematics, etc., selected as the ones ch they were responsible for developing in their ses, are of interest to all teachers.

WEY, JOHN. *The Child and the Curriculum.* Chicago, Ill., University of Chicago Press, 1902. 40 pp.

Statement of relationship between child and curulum that every teacher should keep in mind.

"The fundamental factors in the educative process e an immature, undeveloped being; and certain social ns, meanings, values incarnate in the matured perience of the adult. The educative process is the e interaction of these forces. Such a conception of ch in relation to the other as facilitates completest d freest interaction is the essence of educational eory."

"Every study or subject has two aspects: one for the ientist as a scientist; the other for the teacher as a acher." The teacher must translate the scientist's aterial into life terms. Unless this is done, three evils sult: (1) No organic connection of subject-matter ith the life of the child; (2) lack of motivation; and) the most scientific matter, arranged in most logical shion, loses this quality, when presented in external, ady-made fashion, by the time it gets to the child.

"The studies as classified are the product, in a word, the science of the ages, not of the experience of the ild." It is the teacher that *re-lives* the curriculum nd makes it real to the child. "Subject-matter never an be got into the child from without. Learning is ctive. It involves reaching out of the mind. It volves organic assimilation starting from within."

NGLIS, ALEXANDER. *Principles of Secondary Education.* Boston, Houghton Mifflin, 1918. 741 pp.

An analysis of the factors and principles involved in a onstructive theory of secondary education. Part I is evoted to a study of secondary pupils, their mental and hysical traits and individual differences, their school istory as told by statistics on retardation, acceleration, nd elimination.

Part II is devoted to a consideration of the secondary chool as a social institution—its character, place, and unction. A brief history of the three periods of the evelopment of secondary education in America precedes the chapters showing the status of secondary ducation in other countries and its relation to elementary and higher education. The three fundamental ims of secondary education set forth are: (1) the ocial-Civic Aim, (2) the Economic-Vocational Aim, nd (3) the Individualistic-Avocational Aim.

Part III is devoted to a consideration of the means nd materials by which the aims of secondary education an be achieved. Separate chapters are given over to the consideration of the place of English, foreign languages, mathematics, natural sciences, social sciences, practical and vocational arts, and aesthetic arts, and physical education in the program of studies of the secondary school. Advantages and disadvantages of both the cosmopolitan and the special type high schools are discussed.

BURKE, AGNES and OTHERS. *Conduct Curriculum for the Kindergarten and First Grade.* N. Y., Scribner's, 1923. 123 pp.

This Conduct Curriculum, edited by Patty S. Hill, is the outgrowth of a number of years of experience and experiment in the Horace Mann Kindergarten and First Grade. It describes a systematic attempt to observe and record the progress of young children. Not only are the details of what transpired interesting, but also the standards of attainment which are recorded in terms of typical outcomes in the individual and social behavior of the group.

The different divisions of the curriculum: the work period and other activities including: lunch, hygiene and safety, music, plays and games, pictures, language, literature and library, reading, writing, number, social studies, nature, and excursions are all considered under (a) activities and (b) the changes in thought, feeling, and conduct to which these activities lead.

No doubt can be left in the teacher's mind as to the desired outcomes of this curriculum, for each page is divided in two parallel columns; in the first are listed typical pupil activities and in the column opposite are the "desired changes in thought, feeling, and conduct" that should result from each activity.

DEWEY, JOHN. *Democracy and Education.* N. Y., Macmillan, 1916. 434 pp.

An introduction to the philosophy of education which states the ideas implied in a democratic society and applies these to the problems of education. Starting with the premise that "education is to social life what nutrition and reproduction are to physiological life," the author shows that included in the functions of education, which is a process by which social groups maintain their continuous existence, are: (1) provision of a wider and better balanced environment than that by which the young would be likely, if left to themselves, to be influenced; (2) direction of native impulses and activities of the young; (3) stimulation and satisfying of desire for continued growth. Education is looked upon as a continuous reconstruction of experience. The aims of education are clearly defined from the social viewpoint. School people faced with the problem of curriculum revision will find the chapters on The Significance of Geography and History, Science in the Course of Study, Educational Values, Intellectual and Practical Studies, and Vocational Aspects of Education of interest.

The import of the entire book is suggested in the statements: "The measure of the worth of the administration, curriculum, and methods of instruction of the school is the extent to which they are animated by a social spirit." "All education which develops power to share effectively in social life is moral."

BRIGGS, THOMAS H. *The Junior High School.* Boston, Houghton Mifflin, 1920. 327 pp.

Clear statement of the purposes of the intermediate, or junior high school, the claims for it and the objections to it, form of organization, and its relation to the elementary school and to the senior high school. Psychological, sociological, educational, and vocational advantages of this type of school organization are discussed. The discussion of the special functions of the junior high school includes arguments for and

against Departmental Teaching. How individual differences and subject promotions may be provided for through the departmental work of the junior high school is indicated.

The author points out there have been few attempts fundamentally to reorganize junior high school subject matter—as one of the first necessary steps in this direction, he analyzes the purposes of education and the purposes of an intermediate school. These chapters will be of special interest to those charged with junior high school curricula revision.

School administrators will find data on many practical questions, relative to junior high school organization, in the chapters on Teachers and Salaries, Administration of the Schedule, Social Organization and Control, Buildings and Grounds, and Costs.

PHILLIPS, CLAUDE E. *Modern Methods and the Elementary Curriculum.* N. Y. and London, Century, 1923. 389 pp.

A systematic attempt to consider the place, purpose, and content of the various subjects comprising the curriculum of the modern elementary school. In making these analyses, the author has consistently kept in mind the two things that are of greater importance to the teacher than any single subject course, namely, (1) the fundamental objectives of elementary education as a whole, and (2) the dominant characteristics of children from the biological, psychological, and sociological points of view.

In the treatment of each of the sixteen subjects of the elementary school, their history, objectives, content, supplementary games, problems, and projects are included, as well as measurement of results and latest references for the teacher on the psychology and methods of teaching the subject.

DEWEY, JOHN. *The School and Society.* Chicago, Ill., University of Chicago Press, 1900. 164 pp.

Takes the viewpoint that school is not an individual matter between teacher and pupil, or between teacher and parent. "What the best and wisest parent wants for his own child, that must the community want for all its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy."

The relation of the school to the life of the child is clearly defined. The author shows that an inadequate school wastes human life—both while the child is in school and afterwards if he leaves untrained. "From the standpoint of the child, the great waste in the school comes from his inability to utilize the experiences he gets outside the school within the school; while, on the other hand, he is unable to apply in daily life what he is learning at school." Both the psychology of elementary education and of occupations are discussed.

Teachers of history will be particularly interested in the chapter entitled: History of Elementary Schools.

DEPARTMENT OF SUPERINTENDENCE, NATIONAL EDUCATION ASSOCIATION. *Second Yearbook. The Elementary School Curriculum.* Washington, D. C., National Education Association, 1924. 296 pp.

A survey of representative current curricular practice throughout the United States. This Yearbook represents the joint efforts of curriculum specialists, school administrators, and classroom teachers. Among the topics considered are: The Capacity of the Child for Education; The Machinery and Organization for Devising, Revising, and Supervising the Curriculum; the General and Specific Aims of Education; Who Shall Make the Course of Study and Why; Time Allotments; Differentiation of the Curriculum to Meet Community and Individual Needs of Pupils; and the Project and the Curriculum. Most of the topics are discussed by one or more outstanding school people presenting both theoretical and practical viewpoints. Relative to certain topics, as for example, Time Allotments for Elementary School Subjects, a large amount of carefully organized data is presented. The purpose of the book is "to bring together the elements for the construction of a suitable curriculum for the boys and girls of American public schools."

LULL, HERBERT G., and WILSON, H. B. *The Re-direction of High School Instruction.* Philadelphia, Lippincott, 1921. 286 pp.

Statement of the main problems of junior and senior high school instruction and a proposed solution of these problems by the application of the theory of the Social Core of the High School Curriculum.

A program of instruction from the viewpoint of the social and psychological needs of high school students is outlined.

Of special interest are the many timely illustrations including: Materials for linking history and civics; examples of socialized mathematics, pupil and teacher activities in supervised study period, examples of project-problem instruction in the senior high school, modifications of the existing high school curriculum to meet the vocational and recreational needs of the community, and local surveys showing: (a) the social background of high school instruction, and (2) examples of small city and town high schools undergoing processes of re-direction.

SNEDDEN, DAVID. *Sociological Determination in Education.* Philadelphia, Lippincott, 1921. 310 pp.

A searchlight turned on the "faith objectives" now controlling the departments of education, such as mathematics, physics, fine arts, etc. The study of each of these subjects is shown to have been accredited with producing outcomes which in many cases they did not produce in the past. In other words, each subject is re-evaluated and certain new objectives are tentatively proposed. The need for readjustments of curricula is shown by such facts as the following: Attendance in high schools has increased three times faster than population. Curricula have changed little in the last thirty years and methods of teaching the standardized subjects have advanced but slightly. The teaching of certain traditional subjects has become a fetish. It is pointed out that the introduction of vocational education is both practical and democratic.

The present-day life demands, and the individual abilities necessary to meet these demands successfully, are both discussed. The book is teeming with questions bearing directly upon the bases of curriculum content.

SNEDDEN, DAVID. *Problems in Secondary Education.* Boston, Houghton Mifflin, 1917.

A series of letters, each of which is addressed to a particular type of school official. Each letter sets forth aims and purposes, actuated by a scientific attitude toward the problems of industrial, civic, and human welfare, and applicable to the educational work of the particular person to whom the letter is addressed.

Among the outstanding ideas discussed in these letters are the following:

"Vocational schools should be organized separately and apart from general schools; and individual departments organized for particular occupations should be intimately identified with the industries or other industrial fields for which they give preparation."

"The State University should not be placed in a position of oversight or responsibility for the secondary schools."

"There is a place in secondary education for the study of agriculture purely as a subject of liberal study."

The author's viewpoint as to the value and content of courses in Latin, modern languages, English history, social science, mathematics, physics, and chemistry, biological science, general science, home economics, and physical education are clearly set forth in letters addressed to each of these subject teachers of the secondary schools.

COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION OF THE NATIONAL EDUCATION ASSOCIATION. *Cardinal Principles of Secondary Education.* U. S. Bureau of Education, Bulletin, 1918, No. 35. 32 pp.

Statement of Cardinal Principles which, in the udgment of the Commission, should guide the reorganization and development of secondary education in the United States.

"Secondary education should be determined by the needs of the society to be served, the character of the individuals to be educated, and the knowledge of educational theory and practise available. These factors are by no means static."

No curriculum in the secondary school can be regarded as satisfactory unless it gives due attention to each of the following objectives.

"*Health*, as an objective, makes imperative an adequate time assignment for physical training and requires science courses properly focused upon personal and community hygiene, the principles of sanitation, and their applications. *Command of fundamental processes* necessitates thorough courses in the English language as a means of taking in and giving forth ideas. *Worthy home membership* calls for the redirection of much of the work in literature, art, and the social studies. For girls it necessitates adequate courses in household arts. *Citizenship* demands that the social studies be given a prominent place. *Vocation* as an objective requires that many pupils devote much of their time to specific preparation for a definite trade or occupation, and that some pursue studies that serve as a basis for advanced work in higher institutions. *The worthy use of leisure* calls for courses in literature, art, music, and science so taught as to develop appreciation. It necessitates also a margin of free electives to be chosen on the basis of personal avocational interests.

"Due recognition of these objectives will provide the elements of distribution and concentration which are recognized as essential for a well-balanced and effective education."

DAVIS, CALVIN O. *High School Courses of Study.* World Book Company. Yonkers-on-Hudson, New York. 1914. 172 pp.

A constructive study applied to New York City. First three chapters present the aims and scope of American secondary education so far as they were embodied in courses of study in 1914. Specific examples are given in the brief analysis of the ten school systems with which the New York system is compared. Following the analysis of the general and special secondary school courses in use in New York City in 1908 the author lists his criticisms and recommendations. His study of the high school personnel shows the need for the building of curricula to meet the needs of six "case-groups": (1) those who plan to enter colleges of liberal arts, (2) those who plan to enter technical schools, (3) those who plan to enter the various paths of directive business upon graduating from high school, (4) those whose ability, ambitions, and resources lead them to seek to fit themselves for subordinate professional, business, and commercial offices, (5) those who purpose to become elementary teachers, and (6) a very large group who do not expect to complete the four year high school course, and who will eventually perform office duties in very subordinate places, or fill clerkships, or engage in industrial work. Differentiated high school courses must be provided to meet the individual needs of these six groups.

AT LAST the young child seems to be coming into his legitimate inheritance of scientific investigation and education. Up to the present time no period has been so neglected as that of child hood. It has been left to drift with the tide of ignorance and chance in physical, mental, and moral care. But today the situation is changing.

. . . Health propaganda which has been so intelligently conducted by child specialists, both in medicine and nursing, is raising the physical care given infants and young children in the home and in the school. Laudable as this movement is, however, it must be followed by an equally vigilant investigation of all those conditions which make for mental and emotional life.

. . . One might timidly venture to prophesy a better future for both school and society when the behavioristic conception of education shall be applied in the early impressionable years of childhood.—*Patty Smith Hill, Introduction, A Conduct Curriculum for the Kindergarten and First Grade.*

New Courses of Study for Old

Are Teachers Satisfied with Present Courses?

We constantly hear our elementary curricula described as: "Out of date," "full of dead wood," "an old patch-work," "a hodge-podge, produced by paste-pot and scissors," "non-functioning," and filled with "fads and frills." It is time some one raised the question, Are school boards, superintendents, and teachers generally satisfied with present courses—if not, what are they doing to improve them?

The 1924 Yearbook Committee of the Department of Superintendence recently undertook a review of representative current curriculum practice which involved a nation-wide search for material. It was found that in hundreds of places curriculum revision has taken place since 1920, is now under way, or is being considered. The Yearbook Committee's study, which was representative rather than comprehensive, showed that since 1920, 35 States had revised their State Elementary Courses of Study, 117 cities, including most of the large cities of the United States, and 8 counties had also revised their elementary courses since 1920. The total number of course of study bulletins included in these 160 courses was 482. Letters from State, county, and city superintendents whose courses of study have been recently revised brought out the following facts:

1. A vast amount of work is being done in the field of curriculum revision.

2. There is wide variation as to the amount of distribution of the new courses of study. Some superintendents have distributed thousands of copies—by actual count one city superintendent has distributed 3,277 monographs—others have made practically no distribution outside their own State.

3. There is need for some effective means by which experience and work in the field of curriculum revision can be more widely distributed, particularly to superintendents and course of study committees. This is indicated by the decisive manner in which superintendents answered in the affirmative the question put to them: Of what value would it be to your school system to receive regularly some of the best courses of study as they are issued?

4. Many school people throughout the country are giving time and thought to the "preparation of an American public school curriculum based on American needs and American ideals."

What Are the Outstanding Facts Revealed by a Review of Recent Courses of Study?

Some of the facts that come out of a review of recent courses of study are these:

1. Classroom teachers are serving on practically all course of study committees. In some cities nearly 90 per cent of the teaching body has a share in curriculum revision.

2. Two distinct plans of curriculum organization are in use. According to one plan, a curriculum specialist is called in who directs the local supervisors and classroom teachers throughout all work of revision and carries on special research. In some instances the writing of the curricula begins with him, and when the courses are tentatively formulated, they are taken up by the teachers for study and criticism.

According to the second method, the plan-

ning of the course of study *begins* with the *local* teachers and principals. After they as a group have prepared the various suggestions to the best of their knowledge and ability, it becomes the task of the educational expert to coordinate this material into a harmonious whole.

Some cities call in a subject specialist to work with each subject course committee for a brief period of time. Others have only one specialist who works with all the committees, often for a whole school year.

3. Separate bulletins for each subject course, or for all the work of one particular grade, are the form in which most of the newer city courses are published.

Many are tentatively issued in mimeographed form; after a year's trial they are revised and printed. A few are issued in loose-leaf form. The State courses are usually bound together in one large volume.

Where Can the Best New Courses of Study Be Obtained?

The object of this section is to indicate to those responsible for curriculum revision, the cities and States in which work has recently been done or is being done in this field. It is impossible to review here the hundreds of course of study monographs published since 1920. However, Table 18 presents a list of representative courses, and indicates the form in which they are issued, the number of pages of each bulletin, whether or not it is available for distribution, and when it is not free, what price is charged for it.

Courses of study marked with an asterisk are available for distribution in *limited number* to those making a special study of elementary curricula. When information as to the price per copy could be ascertained, it is indicated in the table.

THE IMPORTANCE OF THE CURRICULUM

In the solution of any problem in the field of education the curriculum is one of the essential factors. Practical school men argue that investigations involving the use of educational and mental tests make a very small contribution unless they result in the modification of pupils' experiences. Studies of the cost of teaching various subject courses are of little value unless compared with parallel studies where the value of each subject is estimated in terms of human needs. Classroom teachers are right in raising the question: Can experimentation with different methods of teaching accomplish what it should unless the methods are used in connection with a sound curriculum? Experience shows that equal ability grouping does not accomplish its purpose unless curriculum differentiation is provided for. Studies of scholarship failures and resulting pupil retardation, school mortality, and the inability of students "to make good" after graduation all suggest the need of constant scientific study and re-evaluation of the curriculum. In other words, before any of the outstanding problems of education can be solved satisfactorily, it is necessary that curriculum practice be carefully surveyed and adequately provided for.

WHOM DOES THE CURRICULUM CONCERN?

The child— he is the direct objective and bears the first shock.

The teacher—she is the interpreter of life. She must make the course of study a living thing for a group of rioting youngsters.

The parent—he is the State's most interested trustee—more inclined than ever before to examine the procedure to which his children are exposed during school hours.

The local community—it is the co-operating critic, asking for a precise statement of aims and objectives in terms easily understandable.

The tax-payer—he foots the bills for the education of his own children or those of his neighbors. He wishes a statement of achievement in terms of cost. He is willing to pay after he has been shown.

The enthusiast—with a special plea for particular propaganda which he wishes the school to assume.

The Nation—its future progress and prosperity are at stake. Its security depends upon the suitable education of its future citizens.

The next generation—it depends upon us, not merely for its physical but also for its social heritage. The children of 1955 will be dependent for their social inheritance upon the skill, wisdom, and foresight with which we of today prepare their parents for tomorrow. The real measure of the worth of education in 1924 cannot be taken until thirty years later, when the children whom we have taught have put our teaching to the acid test of life's responsibilities.

TABLE 18.—REPRESENTATIVE ELEMENTARY COURSES OF STUDY PUBLISHED SINCE 1920

Year	Title	No. of Pages
	ALABAMA	
	Birmingham*	
1922	Synopsis of Course of Study, Elementary Schools	15
	Manual of Instruction—Elem. Schools:	
1923	Part I: Arith., Hist., Lang., Read., and Spell.	72
1923	Part II: Supv. Study, Citizenship Tr., Health, Science, and Geography	43
1923	Part III: Drawing, Home Econ., Music, Man. Tr., Phys. Ed., Writing	21
1923	Synopsis of Course of Study, Elementary Schools	15
	Montgomery*	
1923	Course of Study—Elem. Schools	23
	CALIFORNIA	
	Berkeley	
	Course of Study Monographs:	
1921	No. I, The Course of Study in the work of the Modern School	14
1921	No. II, Home Economics	56
1921	No. III, Nature Study	104
1921	No. IV, Geography	117
1921	No. V, Penmanship	28
1922	No. VI, History and Civics	103
1923	No. VII, Visual Instruction	119
1923	Ind. Ed. Courses of Study—4th, 5th, 6th, Grades—J. H. S., Senior, Part-Time and Evening H. S.	143
	Fresno	
1922	Course of Study in Nature Work	31
1922	Tentative Course of Study—Arts, Com'l. Work, Sp., Music, Pen	m. s.[1]
	Glendale	
1923	Tentative Course of Study—Spell., Read., Gr. and Comp., Arith.—7th and 8th Grades	m. s.
1923	History and Civics; Geog. Grades B7 and A7 Supp. Course for Grades 1-6	m. s.
	Long Beach	
	Elementary Course of Study:	
1920	Arithmetic	53
1920	Music	26
1921	Geography	77
1923	First Grade Arithmetic and Projects	29
1923	Second Grade Arithmetic and Projects	40
1923	Third Grade Arithmetic and Projects	35
1923	Art	18
1923	Penmanship	46
1924	First Grade Reading and Phonics	In press
1924	Second Grade Reading and Phonics	In press
1924	Third Grade Reading and Phonics	In press
1924	First Grade Language	In press
1924	Second Grade Language and Spelling	In press
1924	Third Grade Language and Spelling	In press
	Los Angeles	
	Course of Study:	
1922	Preliminary Statement	10
1922	Kindergartens, 1st and 2nd Grades	88
1922	Third Grade	76
1922	Fifth Grade	79
1923	Third Grade	78
1923	Fourth Grade	115
1923	Sixth Grade	143
1923	Eighth Grade	79
1923	Art	58
1923	Corrective Physical Education	16
1923	Music	39
1923	Home Economics	38
1923	Speech Correction	7
1923	Industrial Arts	69
1923	Tentative Outline for Seventh Grade	m. s.
	Oakland[2]	
1921	Language and Grammar, Grades 1-4	30
1921	Language and Grammar, Grades 5-6	7
1922	Elem. Time Allotments, Kgn.-8	3
1922	J. H. S. Time Allotment, Language and Grammar, Kgn	
	Language and Grammar, Grades 1-4	30
1922	Language and Grammar, Grades 5-6	7
1922	Language and Grammar, Grades 7-9	
1922	Composition and Reading, Grades 1-4	
1922	Reading and Literature, Grades 5-6	
1922	Reading and Literature, Grades 7-9	
1922	Spelling, Grades 1-4	7
	Oakland—contd.	
1922	Dictionary Work H-5, H-9	11
1922	Penmanship, Grades 1-4	31
1922	Music, Grades 1-2	14
1922	Physical Education, Grades 1-2	18
1922	Physical Education, Grades 3-4	19
1922	Physical Education, Grades 5-6	34
1922	Physical Education, Grades 7-9	
1922	Drawing, Grades 1-3	15
1922	Drawing, Grades 4-6	17
1922	Typ., Short., Com. Arith. Grades 7-9	7
1922	Special First Grades	
1922	Health Education, Kgn. Grades 1-4	13
1922	Health Education, Grades 5-6	18
	Graphic Methods in Arith., Spell., Read., Pen., Kgn.-9	
	Woodwork, Grades 7, 8, and 9	
1922	Arithmetic, Grades 1-9	
	Drill Cards in Arith., Grades 3-9	
	Social Studies, Grades 7-9	
	(Supp.) History and Geography L-7	
	(Supp.) Standards of Attainment, 7-9	
	(Supp.) Civics and Geography H-8	
	(Supp.) History H-7 and L-8	
1922	Occupations H-8	
1923	Language and Grammar, Limited, Classes 2-6	30
1923	Music, Grades 3-4	11
1923	Science, Grades 7-9	94
1923	Handbook for Atypical Classes	39
1923	Home Economics, H-7 and L-8	
1923	Arithmetic, Limited Classes 2-6	
1923	Social Studies, Grades 1-6	
1923	Econ. and Voc. Civics 9	
	Thrift—Kgn., Elem., and H. S.	
	Pasadena	
1921	Elem. Course of Study with Tentative Standards for Promotion	86
	San Diego County*	
1923	Manual for Elementary Schools	92
	San Francisco*	
	Course of Study:	
1920	Geography and Elementary Science	133
1921	History, Civics, and Ethics	171
	Santa Barbara*	
	Course of Study: Price	
1921	English, Grades 1-8 $.40	107
1921	Arithmetic, Grades 1-8 .20	31
1921	Geography, Grades 1-8 .40	55
1921	Music, Grades 1-8 .10	19
1921	History and Civics, Grades 1-8 .40	91
	Sonoma County*	
1922	Elem. Course of Study, $.06 postage	213
	COLORADO	
	Colorado Springs	
	Course of Study:	
1921	English	53
1921	Spelling	52
	Pueblo	
	Course of Study for the Grades:	
1921	Geography	72
1921	Arithmetic	22
1921	Hygiene and Physical Education	24
1921	Reading	28
1921	Music and Art	29
1921	History and Civics	16
	CONNECTICUT	
	Bridgeport	
1923	Course of Study in Geography	192
	Waterbury	
1920	Outline in Arithmetic	23
1920	Outline in History and Civics	44
1922	Outline in Spelling	In press
1923	Outline in Geography	In press
	GEORGIA—State Course	
1922	Manual for Georgia Teachers	322
	IDAHO—State Course*	
1923	State Courses of Study and Methods (Price of this Course $.35)	138

TABLE 18.—REPRESENTATIVE ELEMENTARY COURSES OF STUDY PUBLISHED SINCE 1920 (Continued)

Year	Title	No. of Pages
	ILLINOIS	
	Chicago	
1920	Revised Course in Arithmetic	41
1922	Ill's't. Manual in Math., Grades 7-8	178
1923	Elem. Soc. Sci., Geog., Hist	73
1923	Safety Education	160
1923	English in Elem. Schools	147
	Chicago Heights	
1920	Course of Study—Elem. Grades	80
1923	Supplement to Course in English	19
	Elgin	
1921	Course of Study for Elem. Grades	24
	Evanston, Dist. 76*	
1922	Complete Course	45
	INDIANA	
	Elkhart	
	Course of Study:	
1920	First, Second, and Third Grades	38
1920	Fourth, Fifth, and Sixth Grades	55
	Fort Wayne*	
	Course of Study:	
1920	Art (Price of this bulletin, $1.00)	71
1923	Geography and General Science	26
1923	English	8
1923	History	9
1923	Mathematics	44
1923	Physical Education	6
1923	Penmanship	14
1923	Music	24
	Indianapolis	
	Course of Study:	
1922	American Citizenship	80
1922	Reading	62
1922	Geography and Nature Study	78
1922	Art Instruction	54
1922	Oral Drill in Fractions	22
1922	Physical Education and Hygiene	46
1922	Manual Arts—Woodwork, Mech. Dr., Print., Shoe Repair., Upholstering, Sh. Metal, Press. and Repair., Odd Jobs	92
1923	English	158
1923	Arithmetic, Grades 1-3	55
	South Bend	
	Course of Study:	
	Hist., Civics and Geog., Grades 1-3	39
	Geography, Grades 4-6	56
	Geography, Grades 7-8	54
1923	English, Kgn., Grades 1-6	32
	Terre Haute*	
	Course of Instruction:	
1921	Grades 1, 2, 3	9
1922	Grades 4, 5, 6, 7, and 8	14
	IOWA	
	Des Moines*	
1920	Arithmetic, Grades 7-12	l. l.[3]
1922	Geography, All Grades	l. l.
1922	English, Kindergarten to Grade 6	l. l.
1922	English, Grade 7-12	l. l.
1922	History and Civics, Kgn.-Grade 8 (Complete set of bulletins, $1.50)	l. l.
	Sioux City	
1923	Course of Study, Grades 1-6 and J. H. S.	m. s.
1924	Revision of Course of Study	m. s.
	KANSAS	
	State Course*	
1922	State Course of Study	227
	Florence	
1923	Announcement of Courses of Study of the Florence Consolidated Schools	40
	Lawrence*	
	Course of Study: Price, $.25	
1923	Read., Eng., Geog., Arith.	m. s.
1923	Kindergarten	17
	KENTUCKY	
	Bowling Green	
1920	38th Annual Report—Revised Course of Study	61
	KENTUCKY—contd.	
	Lexington*	
	Course of Study:	
1920	Kindergarten	16
1920	Elementary Schools	95
1920	Junior High Schools	.....
	Louisville	
1920	Tentative Course of Study—English	143
	Owingsville	
1920	Course of Study and Manual	130
	LOUISIANA—State Course*	
1921	Course of Study—Home Economics	60
	MARYLAND	
	Baltimore (City)*	
	Course of Study:	
1924	History, Grades 4, 5, and 6	103
1924	Arithmetic, Grades 4, 5, and 6	111
1924	English, Grades 4, 5, and 6	118
1924	Read., Comp., Lit., Spell., and Pen., Grades 1-3 and Kgn	72
1924	Geog., Hist., and Arith., Grades 1-3 and Kgn	78
	Baltimore County	
1921	Baltimore County Course of Study	698
	MASSACHUSETTS	
	State Course	
1920	Bull. 8, Handwriting—Elem. Schools	24
1922	Bull. 4, Phys. Ed. in Public Schools	103
1922	Bull. 6, Teachers' Man. U. S. Hist	78
	Beverly	
1923	Arithmetic, Language and Reading	m. s.
	Boston	
1921	Physical Education, Grades 1-8	213
1922	Special Syllabus Shopwork, Gr. 6-9	40
1923	New Boston Spelling List	31
1923	Sp. Syllabus Draw. and Man. Tr., Gr. 1-3	86
1923	Sp. Syllabus Draw. and Man. Tr. Gr. 4-8	75
1923	Outline in History, Grades 7-8	30
1923	French, Grades 7 and 8	25
1923	Mathematics, Grades 7 and 8	25
	Chelsea	
1921	Prov. Course of Study: Elem. and J. H. S.	163
	New Bedford*	
	Course of Study—Elem. Grades $.60	
1923	History	6
1923	Geography	8
1923	Nature Study	7
1923	Arithmetic	10
1923	Outline in Language	22
1923	History, Grades 7-8	12
1923	Geography, Grades 7-8	15
1923	List of Textbooks	12
	MICHIGAN	
	Detroit[4]	
1922	Library Standards—Platoon and Non-Platoon Types	39
1922	Course in Nature Study	128
1922	Course of Study, Health Instruction	182
1923	Manual in Boys' Construction Work, Grade 4. Non-Platoon Schools	64
1923	Opportunities and Requirements in Local Occupations, Part I	80
1923	Opportunities and Requirements in Local Occupations, Part 2	101
1923	Opportunities and Requirements in Local Occupations, Part 3	99
1923	Tentative Plan for Teaching Phonics	24
1923	Book of Phonic Games and Exercises	168
1923	Course of Study in Science, Gr. 1-6	128
1923	Primary Arithmetic Games	31
1923	Pupil's Guide for Speech Correction	40
1923	Silent Reading Exercises	60
	Highland Park*	
1923	Elementary Course of Study, Group II Cultural Part I Language Outlines	225
1923	Elementary Course of Study, Penmanship Group I Formal	24

TABLE 18.—REPRESENTATIVE ELEMENTARY COURSES OF STUDY PUBLISHED SINCE ... (Continued)

Year	Title	No. of Pages
	MICHIGAN—contd.	
	Jackson*	
	Course of Study: Price, $1.00:	
1923	English—Read., Lang., and Lit., Spell., and Writ.	144
	Kalamazoo	
	Course of Study:	
1920	Book II, English	98
1921	Book V, Art., Ind. Arts, Household Arts, Man. Tr., and Voc. Studies	90
1923	Book I, Early Elem. Dept.	60
	Lansing	
	Course of Study:	
1922	Commercial Education, Grades 7-12	41
1922	Hist., Civics, and Econ., Grades 5-12	35
1922	Man. Arts and Ind. Arts, Grades 5-12	47
1922	Mathematics, Grades 1-12	30
1922	English, Grades 1-12	107
1922	Science, Grades 1-12	43
1922	Phys. Educ. and Hygiene, Grades 1-12	107
1922	Industrial Education, Grades 10-12	36
1922	Penmanship, Grades 1-9	9
1922	Home Economics, Grades 5-12	58
1922	Fine Arts, Grades 1-12	40
1922	For. Lang.; Lat., Fr., Gr. 7-12	47
1922	Music, Grades 1-12	35
	MINNESOTA	
	State Course*	
1923	Curriculum for Elem. Schools $.75)	477
	Minneapolis*	
	Price	
1921	Drawing	47
1922	Kindergarten Curriculum $.10	m. s.
1923	Grammar, Outline and Exercises .50	162
1923	Course of Study, Arith. Prim. .10	.....
1923	Course of Study—Arith. Intermd .10	.....
1923	Music .25	23
1923	Penmanship Outlines	m. s.
1923	Course of Study in Math. Gr. 7-9	m. s.
1924	Art Outlines	m. s.
	St. Cloud*	
	Course of Study: Price $1.50	
1924	Reading, Grades 1-6	162
1924	Fine and Industrial Arts, Grades 1-6	288
	St. Paul	
1921	Outlines for the Public Schools	113
1924	Course of Study, Manual Training	.....
	MISSISSIPPI	
	Hattiesburg	
1920	Course of Study and Manual for Elementary Schools, Grades 1-6	23
	McComb*	
1921	Handbook of McComb City Schools	132
1923	Handbook of McComb City Schools	48
	MISSOURI	
	State Course	
1921	Course of Study—Elementary Schools	334
	Kansas City	
1922	Safety Instr. for Elem. Schools	24
1922	Early History Kansas City, Grade 3	m. s.
1922	Spelling in the Primary Grades	m. s.
1922	Writing in the Primary Grades	m. s.
1922	Informal Reading Tests	m. s.
	Lafayette County	
1922	Vocational Guidance, Grades 7 and 8	26
	St. Joseph*	
1921	Outline for Elementary Schools	130
	St. Louis	
1923	Course of Study in Music	46
	MONTANA	
	State Course*	
1920	Course of Study—City Elem. Schools	432
1923	State Course of Study, Rural Schools (Price $1.10, Missoulian Pub. Co.)	516

Year	Title	No. Pa
	NEBRASKA	
	Lincoln	
1921	Course of Study in Geography	
1921	Course of Study in History and Civics	
1922	Tentative Course of Study—Arith.	
1923	Outline in English, Grades 7 and 8	
1923	English in the Elementary Schools	
1923	Course of Study in Art, Grades 7-9	
1923	Course of Study in Art	
	Omaha	
	Course of Study:	
1921	Art—Elementary Grades	
1922	Music	
1922	Arithmetic—Tentative	
1922	English—Elementary Grades	
1923	Geography—Elementary Grades	
1923	History—Elementary Grades	
	NEVADA	
	State Course*	
1922	Elementary State Course of Study	
1923	Supplement to 1922 Course of Study and 1923 Textbook Adoptions	
	NEW HAMPSHIRE	
	Manchester*	
1922	Course of Study in Arithmetic	
1923	Course of Study in History (Price per set of bulletins, $.35)	
	NEW JERSEY	
	Bayonne	
1922	Course of Study in English	
	Newark*	
1923	Reading Survey: Monograph No. 10	
1923	Nationality and Age—Grade Surveys (Price per set, $.25)	
	Paterson	
1922	Course of Study in Arithmetic	
	Trenton*	
	Elementary Course of Study ($.50):	
1922	Industrial and Fine Arts	
1922	Home Economics	
1922	Arithmetic	
1922	Civics	
1922	Music	
1922	Reading and Literature	
1922	Nature Study	
1922	Handwriting	
1922	Hygiene	
1922	Geography	
1922	English and Spelling	
1922	Tentative Course of Study—History	
	Report of Committee; Elem. Course:	
1923	Geography	
1923	Reading and Literature	
1923	Handwriting	
1923	Civics	
1923	Music	
1923	Industrial and Fine Arts	
1923	Nature Study	
1923	Home Economics	
1923	Hygiene	
	Elementary Course of Study:	
1923	History	
1923	English, Literature and Spelling	
1923	Mathematics, Grades 7-9	
	NEW YORK	
	State Course*	
	Price	
1920	Syllabus, Civics and Patriotism $.10	
1921	Syllabus, Eng. Lang. and Lit. .15	
1922	Syllabus, Hygiene, Kgn. and Gr. 1-6 .20	
1922	Syllabus in History .35	
1922	Course of Study: Nurse Tr. Schools .15	
1922	Art and Industrial Arts .20	
1922	Elementary Syllabus, Music .05	
1923	Elementary Syllabus, Arith. .05	
	New York*	
	Course of Study and Syllabus:	
1920	Geography	
1920	Drawing	
1921	English, Grades 1A-8B	

TABLE 18.—REPRESENTATIVE ELEMENTARY COURSES OF STUDY PUBLISHED SINCE 1920 (Continued)

Year	Title	No. of Pages
	NEW YORK—contd.	
	New York—contd	
1921	Music, Grades 1A-9B	29
1921	Science	40
1921	Arithmetic	32
1921	Cooking	28
1921	Sewing and Constructive Work	16
1921	Penmanship	26
1921	Syllabus on Manners and Conduct	8
1922	General Summary of Course of Study	53
1922	Nature and Environment	33
1923	Preliminary Report of Committee on Grading and Course of Study	134
1923	Civics	16
1923	History	30
1924	Fire and Accident Prevention	15
	NORTH CAROLINA	
	State Course	
1923	Course of Study—Elementary Schools	586
	Charlotte	
1923	Courses of Study of Board of School Commissioners	292
	Winston-Salem*	
1920	Course of Study—Grade Schools	86
	NORTH DAKOTA—State Course	
1920	Voc. Ed., Agr., H. Econ., and Tr. and Ind	55
	OHIO	
	State Course	
1922	State Manual for Teachers on Americanization	71
1923	Suggestions for Use of Elem. Schools	62
	Akron	
1921	Course of Study—Arithmetic	50
1922	Course of Study—Music	.....
1923	Summary of Course of Study by Grades	75
	Cincinnati*	
1923	Course of Study—Kindergartens	31
1923	Industrial Arts, Grades 5-8	41
	Cleveland*	
1922	Course of Study—Hist. Gr. 3-6 ($.50)	68
	Dayton	
1923	Tentative Revision of all Courses	m. s.
	Lorain	
1923	Elementary Course of Study	142
	Richland County*	
1922	Elementary Course of Study	l. l.
	Springfield	
1923	Course of Study and Regulations	248
	Warren County*	
1920	Manual and Course of Study, Price $1.00	182
	OKLAHOMA	
	McAlester*	
1922	Course of Study for Grades	59
	Okmulgee	
	Course of Study Manual:	
	Standards, Min. Essen., Drills Gr. 1-3	80
	Standards, Min. Essen., Drills Gr. 4-6	72
	Tulsa	
1920	Course of Study—Kindergartens	4
	OREGON	
	State Course*	
1920	Safety Education	62
1921	Fire Prevention	30
1922	Course of Study for J. H. S's	46
1922	Physical Education	118
1923	History of Oregon—Teachers' Outline	47
1923	Moral Instruction	15
1923	Manual and Outline—Agriculture	7
1924	Club Work for Oregon Boys and Girls	95
	Portland	
1921	Course of Study, Elementary	127
	PENNSYLVANIA	
	State Course	
1922	Manual and Syllabus, Elem	526
	Course of Study:	
1923	School Health—Hyg. and Phy. Gr. 1-8	163
1923	Agriculture	137
1923	Art Education, Years 1-12	39
1923	Music—Elem. and High	39
1923	English—Years 7-12	60
1923	History and Social Science	296
1923	Mathematics, Years 7-12	39
1923	Commercial Education	167
	Munhall	
1920	Tentative Course of Study	m. s.
	Philadelphia*	
1920	Course of Study, Arithmetic	98
1920	Geog. and Nature Study, Gr. 1-6	119
1921	Course of Study, History, Gr. 1-8	158
1921	Course of Study, Civics, Gr. 1-6	72
1922	Lang., Mus., and Illus., Material, Kgn	42
1923	Health Education, Grades 1-6	130
1923	Geog. and Introductory Science, Gr. 7-8	85
1923	Handwriting Teachers' Manual (Price per set of bulletins, $2.91)	93
	Pittsburgh	
1921	Elementary Course in Arithmetic	57
	Scranton	
1920	Course of Study, Kgn. and First Grade	103
	SOUTH DAKOTA	
	State Course*	
1922	Course of Study, Elem. Schools ($.50)	257
	Lead	
1923	Course of Study Supplement	17
	TENNESSEE	
	Nashville	
1921	Handbook and Course of Study	85
	Shelby County	
1923	Course of Study, Elem. Schools	152
	TEXAS	
	Austin	
1922	Course of Study, Elem. Grades	83
	Bryan*	
1923	Tentative Outline, Course of Study	m. s.
	El Paso*	
1921	Teachers' Handbook	188
	Fort Worth	
1923	Course of Study—Primary Grades	135
	Galveston*	
1920	Elementary Course of Study	96
	Marshall	
1923	Elementary Course of Study	22
	San Antonio	
1920	Elementary Course of Study	162
	UTAH—Salt Lake City	
	Course of Study:	
1921	Morals and Manners, Hist. and Civics, Nature Study, Geog. and Arith	108
1921	Kgn. Music, Art, Home Econ., Ind. Art	75
1921	Physical Education	.....
1923	English, Grades 1-12	102
	VIRGINIA	
	State Course	
1923	Course of Study, Rural and Elementary	291
	Elizabeth City County	
1922	Tentative Course, Arith., Read., Spell., Nature Study, Ind. Arts, Geog., Hist., Lang. (Price per set, $3.00)	m. s.
	Norfolk*	
1923	Elementary Course of Study ($1.80)	431

TABLE 18.—REPRESENTATIVE ELEMENTARY COURSES OF STUDY PUBLISHED SINCE 1920 (Continued)

Year	Title	No. of Pages
	WASHINGTON	
	State Course	
1921	Bull. 37, English, Elem. and Sec	240
	Seattle	
1921	Course of Study in Terms of Children's Activities, Kgn. and Prim	83
1921	History and Civics	.....
1921	Reading	.....
1921	Language	.....
1921	Geography	.....
1921	Arithmetic	.....
1923	Hygiene and Physical Education	.....
1924	Fine and Industrial Arts	.....
	WEST VIRGINIA—State Course*	
1923	Course of Study, Elementary	70
	WISCONSIN	
	State Course	
1922	Course of Study, Elementary Schools	383
1923	Course of Study, Elementary Schools	227
	Eau Claire	
1922	Course of Study, All Grades	265
	Kenosha	
	Course of Study:	
1920	Arithmetic, Elementary	42
1920	Geog. and Nature Study, Elementary	65
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	LaCrosse*	
	Course of Study: Price, $.50	
1923	English Composition	.....
1923	Safety and Fire Prevention	.....
1923	Health, Manners, and Conduct	.....
1923	Bird Study	.....
	Milwaukee*	
1920	Music, Drawing and Household Arts	50
1922	Projects and Games—Primary Grades	178
	Racine*	
1923	Tentative Course of Study	m. s.
	Sheboygan*	
1920	Course of Study, Elementary Schools	254
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1920	Reading, Elementary Grades	71
1920	Arithmetic, Grades 1-6, with Projects	91
	Wausau	
1922	Manual of the Public Schools	116
	Wisconsin Rapids	
1921	Outline of Elem. Course of Study	m. s.
	WYOMING—State Course*	
1921	Outlines in Agr. Rural Gr. 7-8	22
1921	Story Telling	12
1922	Outlines in Agr. Rural Gr. 1-6	103
1922	Teaching Wyoming History by Counties	38
1922	Physical Education in Rural Schools	31

[1] m. s. Mimeograph sheets.
[2] In addition to the elementary courses listed, a large number of course of study bulletins have been prepared for Smith-Hughes and continuation classes, as well as for junior and senior high schools.
[3] l. l. Loose-leaf sheets.
[4] In addition to the elementary courses listed, Detroit has recently issued a number of separate bulletins on special subjects for both elementary and secondary schools.

The Bureau of Educational Research of the Ohio State University reports that in addition to the above elementary courses of study which have been revised since 1920 are the following:

State Elementary Courses of Study: Alabama, Arizona, Colorado, Connecticut, Indiana, Iowa, Maine, Michigan, New Hampshire, New Jersey, Rhode Island, South Carolina, Tennessee, Texas and Vermont.

City Elementary Courses of Study: Ann Arbor, Mich.; Beaumont, Texas; Bellingham, Wash.; Buffalo, N. Y.; Davenport, Iowa; Elkhart, Ind.; Holyoke, Mass.; Houston, Texas; Ithaca, N. Y.; Lima, Ohio; Norwalk, Conn.; Oklahoma City, Okla.; Owensboro, Ky.; Passaic, N. J.; Paterson, N. J.; Peoria, Ill.; Rochester, N. Y.; Springfield, Ill.; Springfield, Mass.; Waco, Texas; West Union, Ohio; White Plains, N. Y.; Wilkinsburg, Pa.

NEW COURSES of study, not merely formal revisions of old ones, are necessitated by changes in our economic, social, and industrial life, by improvement in educational theory and science, and by the increased numbers and heterogeneity of pupils.

PRINCIPLES TO GUIDE IN MAKING COURSES OF STUDY

1. **Subject-matter should have some positive justification.**
2. **Subject-matter should be selected and arranged in accord with the four following outstanding contributions of modern educational theory: (a) General transfer is not automatic and inevitable; (b) There is no general desirable "discipline" from what is merely difficult or distasteful; (c) Adaptation must be made to individual differences of all kinds, and (d) Social education is of increased importance.**
3. **Subject-matter should be so selected and presented as to: (a) Explore the interests, aptitudes, and capacities of pupils by means of worth-while material; (b) Reveal to them by material otherwise justifiable the possibilities in the higher phases of activities of many kinds, and (c) To be of maximum good to the extent to which it is pursued.**
4. **Education must be considered an investment by the State. . . .**
5. **The selection of subject-matter demands for education a directive Golden Rule, which will guide but not restrict. The following is proposed: The first duty of the school is to teach pupils to do better the desirable things that they will do anyway. . . .**
6. **Each course should be so made that any normally intelligent and industrious pupil can pass.**

—Missouri State Committee on Organization and Administration, Principles to Guide the Different Course of Study Committees for Missouri.

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CLEVELAND CONVENTION, FEBRUARY 28, 1923

The American school is going to expand until it contains whatever is necessary to make intelligent American citizens.—Charles H. Judd.

Curricular organization cannot be soundly advanced unless its guiding principles clearly include a sound point of view regarding method of work and study as well as factual materials of the subjects.—Otis W. Caldwell.

The best course of study in reading is possible only by pooling the leadership in the field of reading. . . . The best revidence that communities cannot make satisfactory courses of study for themselves is to be found in the courses of study which have been made by communities. . . . For one community to attempt to solve its problems in isolation is not only inexcusably expensive but the results of such efforts are not satisfactory.—Ernest Horn.

By trying to make the curriculum touch the lives of the children in a way they understood we not only made the school day a joy to the children, and the school, that happy medium for development that educators look forward to, but we dignified "school" in the eyes of the community.—Amalia M. Bengston.

One is haunted by a doubt whether the reason for the inclusion of all the stock contents of the curriculum is a civic and public one. Many of the subjects seem vested interests of us teachers who have spent much time and money acquiring them.—William McAndrew.